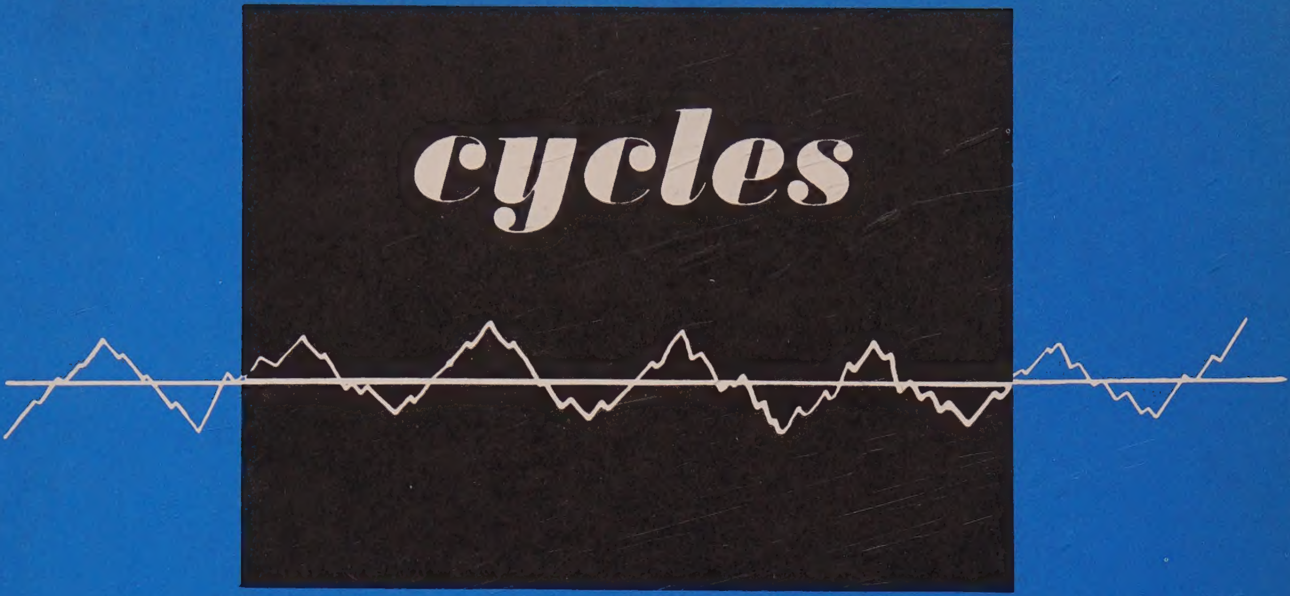

cycles

August 1958

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Manager Membership: GERTRUDE E. ROESSLE *Acting Editor, Cycles:* GERTRUDE SHIRK

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THE DIRECTOR'S LETTER

Dear Member,

Depression

I lived through four years of college and well into the depression of the 30's before I ever heard the word "depression" in connection with a business setback. (The old word used to be "panic.") When, in the 30's, I heard the word "depression" I thought it was a newly coined term. I thought it very apt.

Sometime during that period I was reading some old *New York Times* of 1875 and 1876. (Heavens only knows why!) To my great surprise I noticed that back in the 1870's they used the word *depression* too. It wasn't new after all!

I think the word depression is a good one to use for *major* business setbacks such as the one of 1873-79 or the one of 1929-33. It connotes a time when people are depressed—i.e. dejected, despondent, melancholy. It is *not* a good word for an ordinary routine business setback like the one we have been having.

Effect—or Cause?

In a depression are people depressed because business is poor? Or, maybe, is business poor because people are depressed? I do not know, but I suspect it is the latter.

In psychology the word depression is defined as "an emotional state tending to general inactivity." What better term could be used to describe a state of mind that would bring about a business setback?

As a specific instance, I remember that in 1930, after a stroke from which he shortly died, my father was in what you might call a state of this sort. He had lost some money in the 1929 stock market crash and had had to lower his scale of living.

"Don't you realize that you *must* move to a cheaper apartment?" I said.

"Yes," he mumbled.

"That you cannot possibly afford to stay in this one?"

"Yes."

"Then will you move?"

"No."

"Why not?"

"I don't know."

And so on, over and over again.

He knew he should—in fact he knew he *must*—but his power of *action* seemed to be paralyzed.

I conceive of human beings in the mass as affected by environmental cyclic forces which first elate, then depress them. The elation results in overexpansion; the depression results in constriction and inaction, something like my father's condition, only of course much, much milder.

Setback Checked

I am glad to notice that, as forecast by the Geisinger Indicator, the present business setback is checked. Somehow I could never get very excited about it, even when it was being most loudly touted. (How I hate politicians, and all who, in the words of Socrates, attempt "to make the worse appear the better cause.")

It is, however, much too soon to say it is "over."

The Audit

In this issue we continue the audit of the stock market cycles discovered in 1944. With 14 more years of figures, and with improved techniques, the cycle previously called 6.86 years is now pinned down to 7.00 years. This change makes no noticeable difference in the synthesis.

It is interesting to see how this cycle, so badly distorted at the time of its discovery, snapped back into proper timing in the years which followed.

Four more of the 11 cycles remain to be audited.

Causes, Correlations, Conjectures

The lead story of this issue discusses the first step of a program that may ultimately throw light upon the cause of at least some of our cycles. I have the feeling that the puzzle is beginning to unravel. It should, after all these years!

Science?—or a Swindle Sheet

Here are two recent letters:

From a West Coast Printer

Dear Sir:

Please include many short term stock market cycles. Also sales and earning projection of principal companies such as Standard Oil of New Jersey, General Motors, General Electric, U. S. Steel, and many others.

Yours truly,

From a New York Broker

I am rather amused at the poor showing made by your 'hind-sight' study on page 154 [of *Cycles* for July]. If you had actually included commissions and short-term taxes, your record would even be worse than the one shown. Any novice buying the 'averages,' in the same period of time, would have made 300% or more than you show.

On your longer forecasts they certainly have a lot of hedges - see text on page 172. It appears to me you would have actually sold out in 1954 or 1955. Certainly, you missed the present market rally, if I am reading your chart correctly.

I wonder if anyone in your organization has managed an actual account over the years. It would be interesting to compare the 'real' results after the taxes with some accounts where statistical work and practical experience have managed the account instead of 'star' and 'sun' spot gazing.

Yours truly,

These two letters run squarely into a matter of policy. Should we continue to be a scientific research agency, engaged in extending the frontiers of human knowledge? Or should we become the publishers of a "swindle sheet" as the printer obviously desires and the broker obviously expects?

(For the uninitiated, the term "swindle sheet" or "poop sheet" refers to the sort of publication that tells you what and/or when to buy; what and/or when to sell. Such sheets are not all bad. They gain their unappetizing name from the fact that most of them are.)

We do *not* issue a swindle sheet. We never will! Our purpose is *not* to help people make a killing (generally called "an honest buck") in the stock market. Our purpose is to find out about cycles. If, in exchange for the $10 or $15 they contribute to our operating and research expense, our members can get some useful information (and most of them can and do!) well and good—*but making our members rich is not our purpose.*

We studied and reported upon the 17-week cycle in stock prices (the article referred to by our broker friend) because it is a rhythmic cycle that has repeated many times. It seems to be a valid cycle. Further study will show. The strength and dominance of it are unimportant (from the point of view of cycle science) except as these characteristics add to its creditability as a cycle. Scientists are not concerned with size. They study mice as well as elephants! Even the lowly atom.

To carp about the fact that a certain particular cycle is not particularly profitable is equivalent to damming an ornithologist for studying robins because there is not much *meat* on them! The stomach is important, but it is not the whole of life.

Moreover, as Miss Shirk said in her report, "This article gives you information about one short cycle in a general stock market index. If you had complete knowledge of this cycle, and all the other short cycles, and all the long cycles, there would still be other non-cyclic factors to take into account before you would decide to buy or sell a specific stock on a specific date." Seemingly our broker friend missed reading this part of the story.

The "hedges" he refers to are not hedges. They are an attempt to keep people from *mis*using the facts which we have uncovered. How could one hope to catch little wiggles, for example, with cycles all of which are *over four years* long?

Our broker friend—rather sneeringly, I thought—wonders if anyone in our organization has managed an actual account over the years. Of course not! *We are not and do not pretend to be experts in speculation and/or money management.*

We are students of *rhythmic cycles* in any and all fields of natural and social science—including among dozens of other things, business, interest rates, stocks, prices. As a result of our studies we know facts about these things that other people do not know. *We are, as far as we know, the CHIEF source of such knowledge.* Our members put these facts to work, along with other sorts of facts to help them to make better forecasts than they otherwise could make. *We* do not make forecasts—that is, we do not try to tell what will happen *this* time. The cycles merely give you the *odds* that this or that will happen if the cycles continue.

I know, Mr. Printer and Mr. Broker, that you want a swindle sheet—but we are going to stick to science!

Cordially yours,

Edward R. Dewey

Director

Research by Staff

THE 11-YEAR CYCLE IN SUNSPOTS*

BY EDWARD R. DEWEY

I have just unearthed some important and exciting facts in regard to the sunspot cycle.

Average Length 11.094 Years

First, I have found that the average length of this cycle, 300 B.C. to date, seems to be 11.094 years.

Why is this dull statistic exciting? Why is it even interesting? There are two reasons:

One, because it seems to kill, once and for all, the theory held by some, that the sunspot cycle is caused by or related to the quarter-synodic period of the planets Saturn & Uranus (11.34 years).

The "synodic period" of two planets is the length of time required for the two, having started out in line with each other and with the sun, to be in line with each other and the sun again. The synodic period of Saturn and Uranus is, on the average, 45.36 years. Thus, their quarter-synodic period is, on the average, 11.34 years (1/4 of 45.36). Actually, their quarter-synodic period varies from 9.3 years to 13.5 years in length, because the planets travel at different speeds in different parts of their orbits. For the last two hundred years their quarter-synodic periods have averaged 11.25 years. This length is very close to the length of the sunspot cycle over this same period. Hence the theory, which now seems to be discredited.

Here is the second reason that this dull statistic of 11.094 years is important. Now that we know the length of the sunspot cycle with a great deal of accuracy, we can compare this length with the length of the 11-year cycle in other things that some people believe to be related to the sunspot cycle, such as the number and/or intensity of battles, the thickness and thinness of tree rings, the thickness and thinness of rock strata, climatic changes, commodity prices, etc. If, over the same period of time, the length of this cycle in these other things is the same, the two phenomena may be related. If however, over the same period of time, the length of the 11-year cycle in any of these phenomena is found to *differ* from the length of the sunspot cycle, there is no possibility of any connection between sunspots and the phenomena involved.

Length of Cycle Varies

The second important fact I have discovered is that this average length of 11.094 years is a mere mathematical abstraction, for the average length of the sunspot cycle varies in what, on its part, seems to be a cycle. For about half of this cycle the length of the sunspot cycle averages about 11.04 years—for the other half about 11.17 years—a difference of about 1%.

Why is this fact important?

First, because it seems to show that sunspots are *not* caused by ultra-long energy waves of uniform wave length, as some people think. Another theory eliminated!

Second, the fact of *varying* wave length helps us even more to prove or disprove alleged interrelationships of sunspots and other phenomena such as battles, tree rings, rock strata, climate, prices, and the like. If any of these phenomena are related to sunspots—either causally or as the result of a common cause—their 11-year cycle will vary like the sunspot cycle. If it does not vary,

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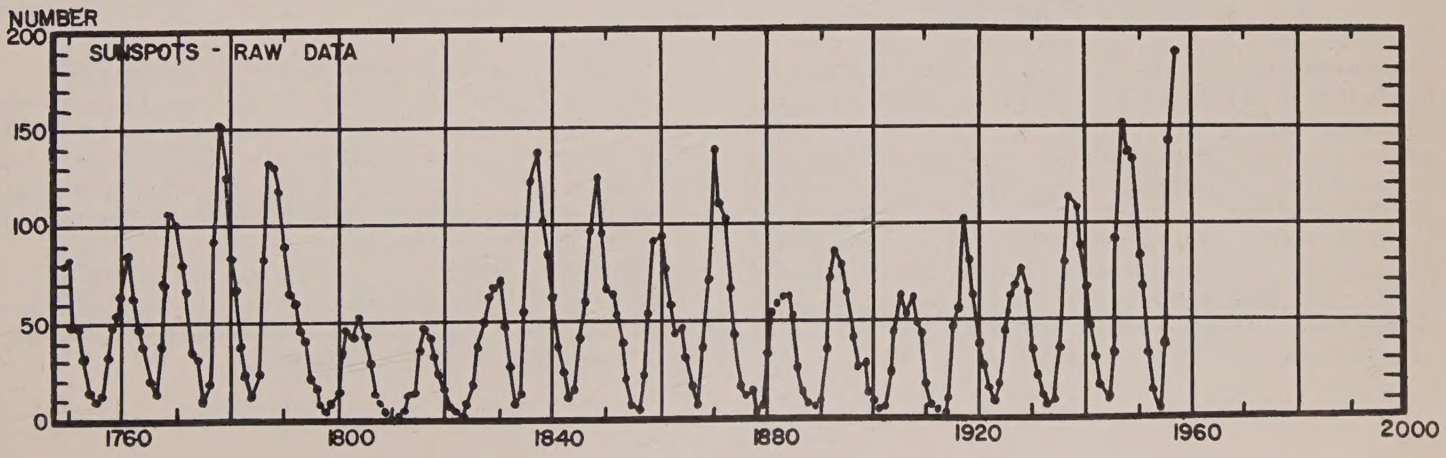
*A postscript to chapter 10 of *Cycles—The Science of Prediction,* by E. R. Dewey and E. F. Dakin.



obviously it is not related.

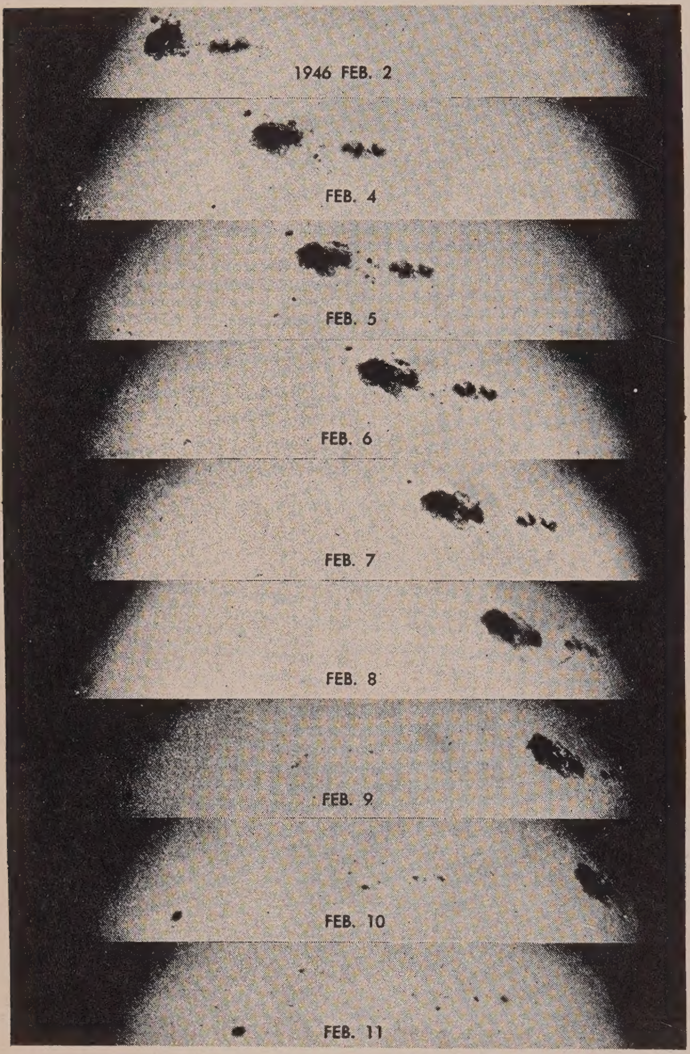
Sunspots Are Forced Oscillations

The third discovery is that sunspots do not seem to be dynamic. If they were dynamic each wave, eleven years long (more or less) would start where the old wave stopped. Instead of this, there seems to be some regulating mechanism so that when we have one or more sunspot cycles too long or too short, something makes succeeding cycles shorter or longer, as the case may be, to compensate and to hold the average length to a norm.

Why is this fact important?

First, because it, too, seems to discredit the theory held by some that sunspot cycles *are* dynamic.

Second, because if sunspot cycles are not dynamic, but are forced oscillations (caused by some factor outside the phenomena itself), we are spurred to search for this factor.



A GIANT SUNSPOT

Varying aspects of the great sunspot group of February, 1946, as it was carried across the disc by the solar rotation. This is the largest spot group to that time, with an area of 6.3 billion square miles, or more than 30 times the area of the earth's surface.

These giant spot groups were easily visible to the unaided eye through smoked glass or thick haze at sunset, and in some localities attracted wide attention. Photographed at the 60-foot tower telescope of the Mount Wilson Observatory.

Length of Major Cycle About 1680 Years

The fourth discovery is that the length of the major cycle in which the length of the sunspot cycle seems to vary is about 1680 years, with sub-cycles of about 210 years (1/8th as long).

This fact is important because it may give us a clue as to the cause, not only of the sunspot cycle, but of many other cycles as well. What astronomical event recurs in a cycle about 1680 years long *and at a speed which varies by 1%* from the slowest to the fastest part of the cycle? No one knows, but the search is on!

The 1680-Year Family of Cycles

Is this length of about 1680 years or a little longer related to other cycle lengths? Perhaps.

It is a well known fact that cycles often come in families. That is, when you find a cycle of one length you often find another cycle twice or three times as long, and so on indefinitely. One of the best known of these families is the one based on an important cycle about 17 3/4-years long. Cycles have been found that seem to be about 1/2, 1/3, 1/4, 1/6, 1/9, 1/12, 1/16, 1/18, 1/24, 1/27, 1/36, and 1/54 of 17 3/4 years. Cycles have also been found that are about twice, 3 times, 6 times, 8 times, and 9 times as long.

The cycle that is eight times 17 3/4 years measures 142 years. It is an important cycle in the numbers of international battles. Twelve times 142 years would be 1704 years—not too far from 1680. Moreover, some preliminary work with the 17 ¾-year cycle in war shows that this cycle has a varying length and that the length of this cycle is a shade less than 17.75—perhaps 17.72 years. If this is the true base length, perhaps the war cycle is 141.76 years long instead of 142 years long. If so, twelve times this length would be about 1700 years. Could the major sunspot cycle be as long as 1700 years? Easily.

The Picture

Do you see the picture beginning to emerge?

What we now need to do is to see if the war cycles vary in length *in the same way* and *at the same times* as the sunspot cycle. Then we need to remeasure all lengths with the greatest possible accuracy to see if then all fit together—or don't!

I'll do all this as soon as I can.

(Complete details in regard to all of this research will be found in an article called "The Length of the Sunspot Cycle" in the July 1958 issue of the *Journal of Cycle Research*.)

THE 7-YEAR CYCLE IN STOCK PRICES

BY GERTRUDE SHIRK

This month we are continuing our audit of the projection to 1990 of 11 stock price cycles in the Standard & Poor's Corporation Combined Index by reviewing the 6.86-year cycle.

Improved Length

The length of this wave appears to be an even 7 years instead of 6.86 years as determined in 1944. Because we have added 14 years to the data there are now two more repetitions of the cycle to use in deciding upon a more correct length. There are now a total of about 12 repetitions of the cycle over the period we are covering—1871 through 1957.

The improvement in the definition of the length of the cycle necessitated a revision of the combination which includes it. When the revised length (and subsequently revised timing and amplitude) were decided upon, the previously used values were removed from the combination and the improved values substituted.

Because, of course, the old 6.86- and the new 7-year cycles are actually one and the same wave, the changes in the combination are slight.

Revised Combination

The revised combination of 11 cycles and the underlying trend for the 1944—1965 period are shown below on Figure 1 by means of a broken line. The solid line shows the actual Standard & Poor's Combined Index.

The effect of the characteristics of the 7-year cycle are blended with all the other waves into the combination line on Figure 1.

The 7-year cycle had its most recent crest at 1957.9. This is November 25, 1957. The cycle is now on the way down to a trough which will come ideally at 1961.4.

The strength of the 7-year cycle is 6.9% of trend at time of crest.

When you study Figure 1 there is one point that should always be kept in mind.

We repeat this so frequently that it bores us, but it is fundamental to an understanding of what we are trying to do. The point is that the broken line on Figure 1 does not show what is going to happen to the stock market.

Cyclic Force

What the broken line shows could be called the cyclic force. It is an extension into the future of the combination of 11 cycles apparently present in stock prices in the past (plus the underlying trend.) The extension is currently going downward to the low scheduled to come ideally at 1960.

One way to explain the limitations of cycles in forecasting is to say that, in this study, the 11 cycles we have combined are presently exerting a downward pressure. (We assume the cycles are real, correctly determined, and will continue to operate.)

Obviously any downward force can be lessened by a smaller upward force, or leveled by an equal force, or reversed by a greater force. The pressure exerted by the cycles can thus be modified by other non-cyclic forces, such as inflation.

What we are doing in our audit of this study is to review the cycles used in the combination and to evaluate them in the light of the experience since 1944. If we feel reasonably sure that each

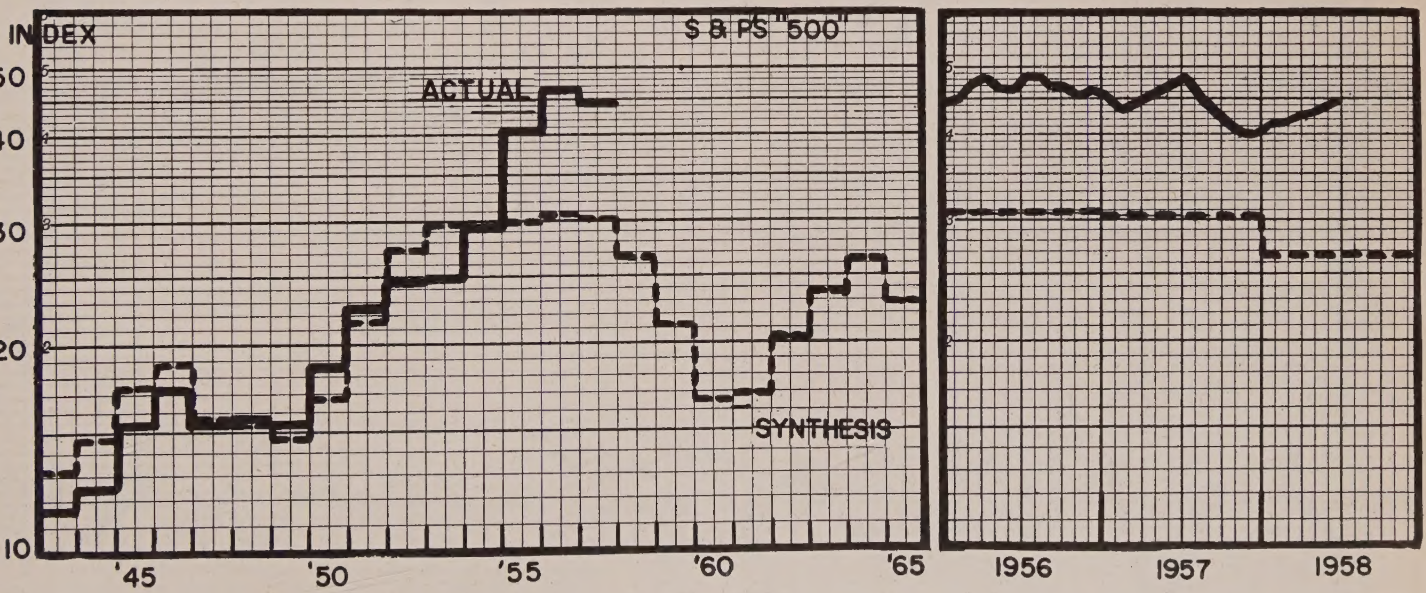


Fig. 1 Standard & Poor's Combined Index. Comparison of Actual Index and the Combination of 11 Cycles and Trend.

cycle is real, and correctly determined, then the combination will give us the best possible measure of the force exerted by the cycles.

Methods of Checking

In evaluating each of the waves in the combination several questions must be answered.

First, how well does the ideal wave fit the data upon which it is based?

Second, how would an academic gain-loss table based on this one wave alone have worked? That is, would this wave alone have been profitable?

Third, and most important, how has this wave performed since it was first isolated?

Wave Performance

To answer the first question we must compare the ideal wave to the figures from which it was derived.

Figure 2 shows as the solid line, Curve A, the figures which were used to define the cycle. The ideal cycle is shown as the broken line, Curve B.

To see the line of the actual wave more clearly we smoothed the figures in Curve A and plotted the result as Curve C in Figure 2. Curve C is also compared to the ideal cycle, Curve B.

You can compare the two lines by eye, but to make a closer check, we compared the timing of the actual and the ideal turning points of the wave. This comparison is recorded in Table 1.

TABLE 1

Standard & Poor's Combined Index
Comparison of Actual and Ideal 7-Year Wave
Based on Timing of the Turning Points*

	TURNING POINTS		COMPARISON-ACTUAL, WITH IDEAL	
	IDEAL	ACTUAL	EARLY	LATE
LOW	1877.4	1877.5		0.1
HIGH	1880.9	1881.5		0.6
LOW	1884.4	1885.5		1.1
HIGH	1887.9	1886.5	1.4	
LOW	1891.4	1891.5		0.1
HIGH	1894.9	1895.5		0.6
LOW	1898.4	1900.5		2.1
HIGH	1901.9	1902.5		0.6
LOW	1905.4	1903.5	1.9	
HIGH	1908.9	1906.5	2.4	
LOW	1912.4	1908.5	3.9	
HIGH	1915.9	1916.5		0.6
LOW	1919.4	1918.5	0.9	
HIGH	1922.9	1923.5		0.6
LOW	1926.4	1926.5		0.1
HIGH	1929.9	1929.5	0.4	
LOW	1933.4	1932.5	0.9	
HIGH	1936.9	1936.5	0.4	
LOW	1940.4	1942.5		2.1
HIGH	1943.9	1946.5		2.6
LOW	1947.4	1949.5		2.1
HIGH	1950.9	1951.5		0.6
LOW	1954.4	1953.5	0.9	

*SEE FIGURE 2.

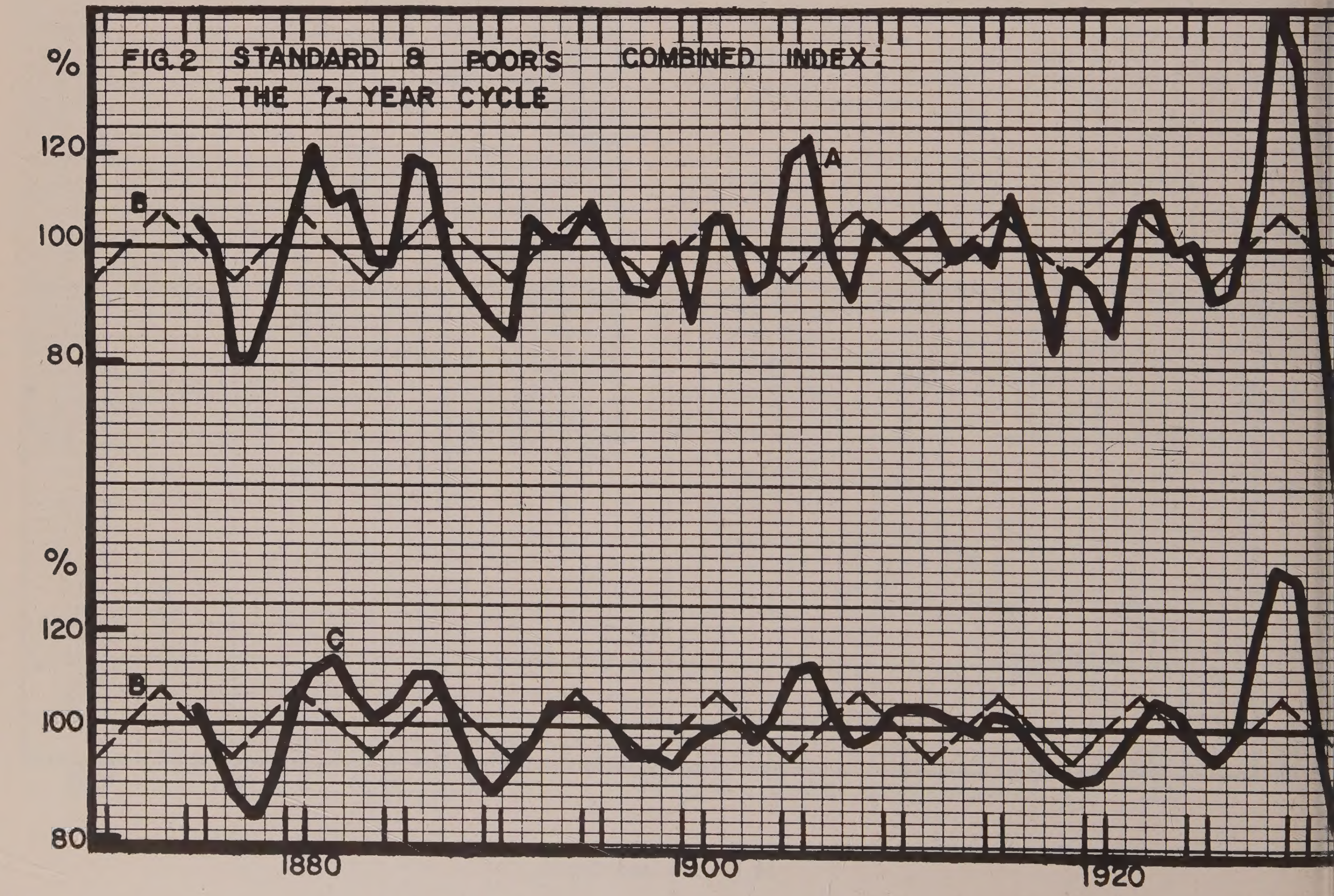


FIG.2 STANDARD & POOR'S COMBINED INDEX:
THE 7-YEAR CYCLE

Of the 23 turning points actually recorded in the deviations (the figures upon which the cycle is based and which are plotted as Curve A on Figure 2), 14 have been within a year of ideal timing. This is 61%. Remember that the turning points could be as far as 3.5 years away from the ideal timing.

There are two general areas of poor correspondence between the two lines, Curves A and B in Figure 2. The first area was around 1905, when the actual line was upside down in relation to the ideal line. But by 1915 the actual data are fairly well back on the track of the ideal wave.

The second area of poor agreement centers around 1945. Here, by the time of the ideal 1950 peak, the actual wave is again following the general contour of the ideal line.

Gain-Loss

In answer to the second question a gain-loss table is given on page 190. Over the entire period of 1871 to date there would have been 24 transactions with an average profit per transaction of 24%. The average yearly profit would have been 6.7%.

Of the 24 transactions based on this one wave alone only 7 would have shown a loss.

How It Came Out

The end portion of Curve A on Figure 2 is accentuated to mark off the data that have been added since the 7-year cycle was first isolated in 1944.

This shows how the cycle has come out.

One technical note of explanation should be inserted at this point. The figures plotted as Curve A are deviations from a 9-year moving average. Every point on the line is the center of a 9-year period. The figure plotted at 1953, which is the last figure plotted on Curve A, is based on the average of 9 years (1949 through 1957). 1953 is the center of the period covered by the last 9 available figures.

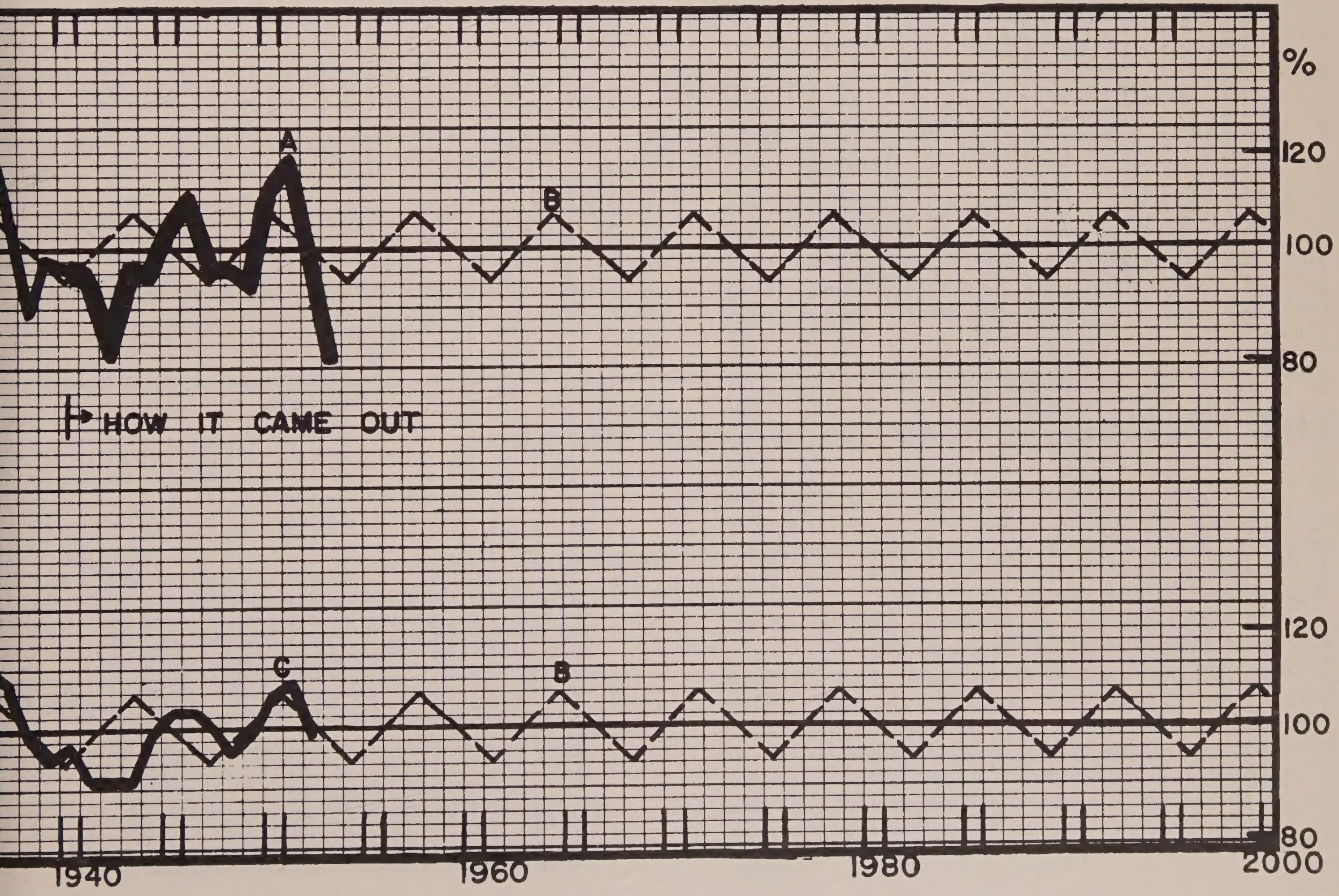
At the time the first work was done on this cycle the deviations line (Curve A) ended with the year 1939.

At that time the actual line was in fair juxtaposition to the ideal line. For the next complete cycle the actual data performed poorly. The 1940 trough was delayed, and the next top and bottom were also delayed.

Then the actual line slid back onto the track and the 1950 top was within a year of ideal timing.

The fact that when the regular performance of the cycle is disturbed, it sooner or later "gets back on the track" is one of the factors which leads us to give credence to the cycle.

All factors considered, it appears we are justified in continuing to include the 7-year cycle in our combination.



Gain-Loss Table
Based on 7-Year Cycle in Standard & Poor's Combined Index
1871 to Date

			Long				Short				Round Trip	
Turning Points					Gain or Loss				Gain or Loss		Gain or Loss	Cumulated
	Date		Buy	Sell	Amount	%	Short	Cover	Amount	%	%	%
High	November	1873.9		4.04			4.04					
Low	May	1877.4	2.94					2.94	1.10	37.4		37.4
High	November	1880.9		5.61	2.67	90.8	5.61					
Low	May	1884.4	4.65					4.65	0.96	20.6	111.4	148.8
High	November	1887.9		5.30	0.65	14.0	5.30					
Low	May	1891.4	4.95					4.95	0.35	7.1	21.1	169.9
High	November	1894.9		4.34	0.61	-12.3	4.34					
Low	May	1898.4	4.87					4.87	-0.53	-10.9	-23.2	146.7
High	November	1901.9		8.08	3.21	65.9	8.08					
Low	May	1905.4	8.50					8.50	-0.42	- 4.9	61.0	207.7
High	November	1908.9		8.83	0.33	3.9	8.83					
Low	May	1912.4	9.56					9.56	-0.73	-7.6	-3.7	204.0
High	November	1915.9		9.46	-0.10	-1.0	9.46					
Low	May	1919.4	8.97					8.97	0.49	5.5	4.5	208.5
High	November	1922.9		8.80	-0.17	-1.9	8.80					
Low	May	1926.4	11.56					11.56	-2.76	-23.9	-25.8	182.7
High	November	1929.9		20.58	9.02	78.0	20.58					
Low	May	1933.4	8.87					8.87	11.71	132.0	210.0	392.7
High	November	1936.9		17.36	8.49	95.7	17.36					
Low	May	1940.4	10.58					10.58	6.78	64.1	159.8	552.5
High	November	1943.9		11.33	0.75	7.1	11.33					
Low	May	1947.4	14.34					14.34	-3.01	-21.0	-13.9	538.6
High	November	1950.9		9.83	5.49	38.3	19.83					
Low	May	1954.4	28.73					28.73	-8.90	-31.0	7.3	545.9
High	November	1957.9		40.35	11.62	40.4	40.35					
Low	May	1961.4										
					Total	418.9			Total	167.4	Total	586.3

Number Transactions	24
Total Gain	586.3%
Gain per Transaction	24.4%

Number Years	87
Gain per Year	6.74%

Note: "Gain Loss," or "Buy-Sell" tables as they are often called, are not printed with the thought that anyone would have used them for buying and selling, even if they had been available years and years ago. You would never buy and sell on a *single* cycle.

However, such tables are useful. They show the extent by which the one cycle being studied has dominated over all other cycles and randoms. They also show ratio of gain to loss and give many other facts of value.

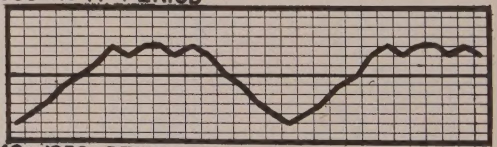
THE 17-WEEK CYCLE IN STOCK PRICES

Last month we reported to you upon a 17-week cycle present in industrial stock prices from January 1st, 1948, to date. It is a weak unimportant cycle and by itself of no particular practical importance. During the ten year period under review it faded out and reappeared, perhaps as the result of other closely related cycles.

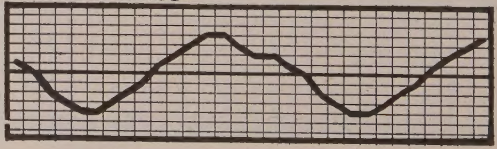
Since the publication of our last report we have been studying this cycle in the ten years 1938—1947. It is present on the average in these figures too, but with slightly different timing, as shown by the charts to the right. This fact may mean that the cycle is a shade longer than 17 weeks, or it may mean that it is not tied to any rigid schedule. Further study will show.

THE AVERAGE 17-WEEK WAVE:

A. 1938-1947 PERIOD



B. 1948-1958 PERIOD



THE STOCK MARKET VS. MANFACTURING PRODUCTION

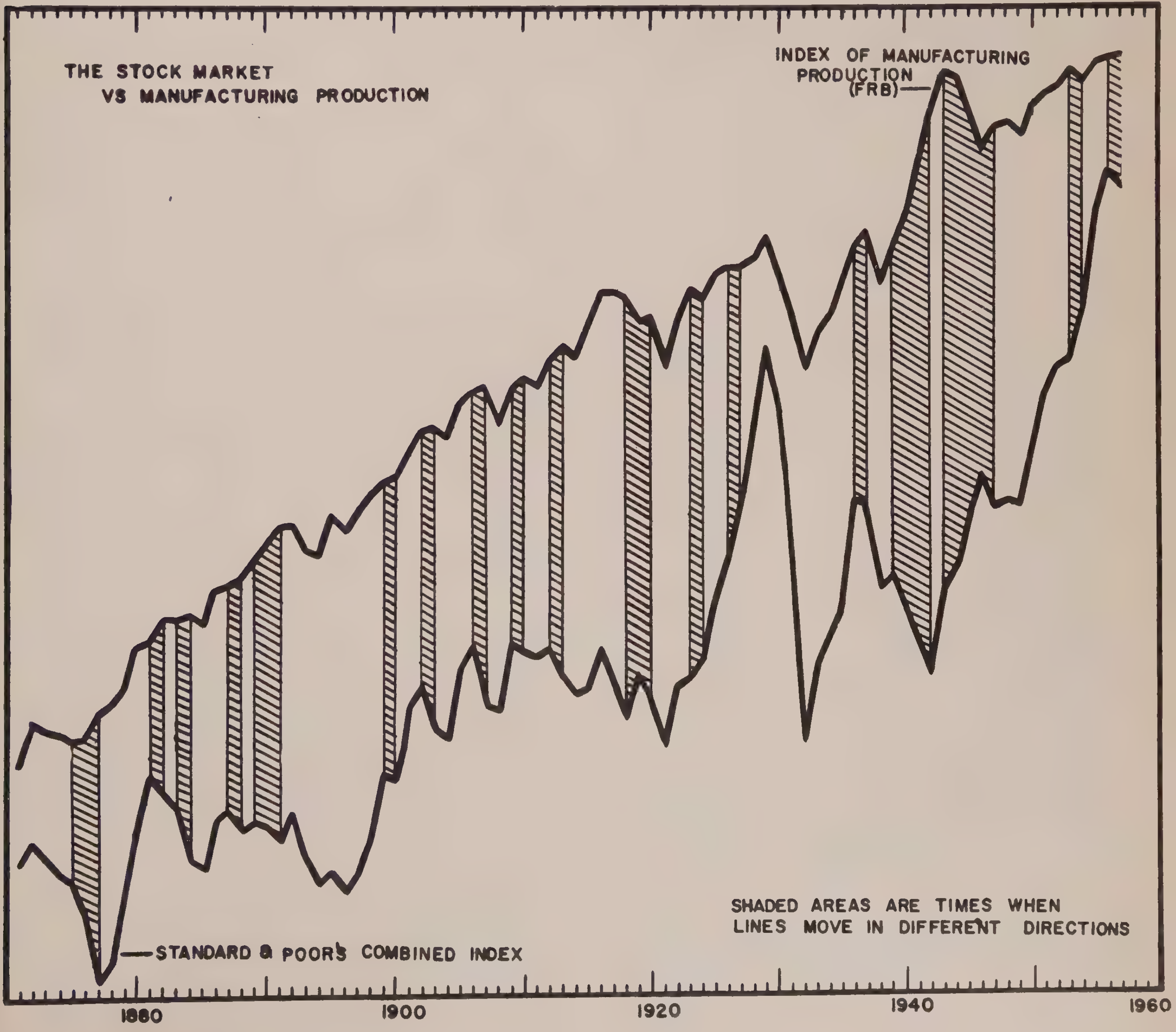
BY E. R. DEWEY

We are sometimes asked why all economic series do not have the same cycles. It is because the various series do not always move in a similar fashion. We do not know why it is so, or why it should be so, or should not be so, but it is a fact, for instance, that half the time when the stock market is going down, business is going up.

People generally believe that stocks and business go up and down together consistently. But they do not. It is true that most of the time when stock prices are going up, business is also going up. You would expect that when stocks are going down, business would also be going down. However, only half the time when stocks go down does business also go down.

The chart below diagrams the record of stock prices and compares them to the record of business for the years 1871 through 1957. The shaded portions of the chart cover the periods when stocks and business were *not* moving in the same direction.

For the technician it should be mentioned that the chart is drawn to show only the comparison in the direction of the moves from year to year between the two series. Absolute levels of the two lines cannot be compared because stocks are plotted on two cycle paper whereas business is plotted on three cycle paper. To avoid confusion the vertical scale is omitted.



We are using the Index of Manufacturing Production to represent business activity, and the Standard & Poor's Combined Index to represent the stock market. (1941-43=10)

Over the period 1871 through 1957, there were 47 years when stocks were up from the previous year. There were 39 years when stocks were down from the previous year.

Of the 47 times that stocks were UP, manufacturing production behaved as follows:

In 40 of these years production was also UP
In 6 of these years production was DOWN
In 1 of these years production DID NOT CHANGE.

Of the 39 times when, from one year to the next stocks went down, manufacturing production behaved as follows:

In 20 of these years production was also DOWN
In 18 of these years production was UP
In 1 of these years production DID NOT CHANGE.

Thus, you can see, on the UPside of the market, in 40 out of 47 possibilities, stocks and production did move in the same direction. The story is different for the times when stocks were down from the previous year.

On the DOWNside of the market, in 19 out of 39 possibilities, or about half the time, stocks and production moved in *different* directions.

The complete record of the figures on which this little analysis is based is given in the table below. A study of these two series can turn up many interesting facts in addition to the one we are talking about.

For instance, one of the first things you notice is that stock prices have gone from 4.69 to 44.38 over the entire period. Last year stock prices were nine times the 1871 level. Production, on the other hand, was 34 times the 1871 level in 1957.

It is easy to see also that stocks and general business (as measured by manufacturing production) do not go up and down together. The cycles in each are different.

Comparison of the Stock Market With Manufacturing Production

YEAR	S&P "500" INDEX	INDEX: MANUFACTURING PRODUCTION[2]
1871	4.69	4.22
1872	5.03	5.18
1873	4.80	5.07
1874	4.57	4.95
1875	4.45	4.78
1876	4.06	4.78
1877	3.14	5.41
1878	3.38	5.66
1879	4.12	6.14
1880	5.21	7.64
1881	6.25	7.76
1882	5.90	8.75
1883	5.63	8.66
1884	4.74	8.72
1885	4.60	8.4
1886	5.36	10.0
1887	5.53	10.4
1888	5.20	10.6
1889	5.32	11.7
1890	5.27	12.5
1891	5.03	13.7
1892	5.55	13.8
1893	4.78	12.2
1894	4.39	11.9
1895	4.53	14.6
1896	4.23	13.4
1897	4.45	15.0
1898	5.05	16.2
1899	6.29	17.1
1900	6.15	17.5
1901	7.84	19.7
1902	8.42	22.1
1903	7.21	22.6
1904	7.05	21.2
1905	8.99	25.3
1906	9.64	27.2
1907	7.84	27.6
1908	7.78	22.8
1909	9.71	27.0
1910	9.35	28.8
1911	9.24	27.6
1912	9.53	31.7
1913	8.51	33.9
1914	8.08	31.8
1915	8.31	37.3
1916	9.47	44.3
1917	8.50	44.0
1918	7.54	43
1919	8.78	38
1920	7.98	39
1921	6.86	30
1922	8.41	39
1923	8.57	45
1924	9.05	43
1925	11.15	48
1926	12.59	50
1927	15.34	50
1928	19.95	52
1929	26.02	58
1930	21.03	48
1931	13.66	39
1932	6.93	30
1933	8.96	36
1934	9.84	39
1935	10.60	46
1936	15.47	55
1937	15.41	60
1938	11.49	46
1939	12.06	57
1940	11.02	66
1941	9.82	88
1942	8.67	110
1943	11.50	133
1944	12.47	130
1945	15.16	110
1946	17.08	90
1947	15.17	100
1948	15.53	103
1949	15.23	97
1950	18.40	113
1951	22.34	121
1952	24.50	125
1953	24.73	136
1954	29.69	127
1955	40.49	140
1956	46.62	144
1957	44.38	145

1. STANDARD & POOR'S COMBINED INDEX OF STOCK PRICES, 1941-43=10.
2. INDEX OF MANUFACTURING PRODUCTION, 1947-49=100.
   1871-1898: W. M. PERSONS INDEX OF PHYSICAL PRODUCTION OF MANUFACTURING
   1899-1918: NATIONAL BUREAU OF ECONOMIC RESEARCH INDEX OF PHYSICAL PRODUCTION, ALL MANUFACTURING.
   1919 TO DATE: FEDERAL RESERVE BOARD INDEX OF MANUFACTURING PRODUCTION.

RESEARCH BY STAFF,

Research by Others

CYCLES IN THE NUMBERS OF EMINENT MEN

BY STEPHEN W. AND NETTA E. GRAY

The number of famous men and women alive in the Western World is not constant from age to age. There are periods of greatness and periods of mediocrity. If one counts the number of eminent people alive in the world, decade by decade, using a standard biographical reference source such as the *Columbia Encyclopedia,* one can confirm the suspicion that there have been wide fluctuations in the production of able individuals by the human race.

We have drawn such a curve of the number of famous men and women living at each decade for the past 2500 years. This curve is shown in Figure 1. Some 25,000 names from the *Columbia Encyclopedia* were used. No selection was used and no contention is made that the individuals listed should be considered "genius" calibre. They are merely people notable for ability above the ordinary.

The most striking feature of Figure 1 is the relatively level portion lasting to about the year 1000 and the tremendous upward sweep from that date to modern times. Had we carried the curve to 1950 it would hardly have stayed on the page!

This hugh rise represents several things. Primarily it is a measure of the increasing population of the world. When we remember that one out of every twenty people who ever lived is alive today we need not be surprised at this rise. In the second place the rise represents the justifiable emphasis of interest in those people most recently dead. Almost any biographical dictionary will show a bias of this sort.

This great secular or long term change was removed from the data by using running 500 year averages to establish a smooth trend line. This line, by the way, was of almost exactly the same shape as the population curve of the Western World as approximated by the best demographers. Using the trend line thus determined as a new base line, we replotted our figures to obtain the curve in Figure 2 which may be called a "standardized" curve. It is in this curve that one may begin to look for cycles.

Inspection suggested that cyclic variation might be present, but no tested cycle length fits well until we reached 400 years. At this interval six clear waves appeared in the data. Their peaks averaged 392 years apart and their troughs averaged 398. Strictly we should say 39.2 and 39.8 decades, for our time unit was the decade and not the year.

This 400-year cycle did not turn out to be a simple wave. It was a complex of at least three component waves. We have termed it an epicycle. Each crest has a double or bimodal peak with about 100 years between maxima. In three of the epicycles these peaks are of approximately equal height; while in three others one of the pair is definitely the larger. We have indicated this pattern by a regular 400 year split-peak cycle drawn above the data in figure 2.

A third peak in each epicycle is visible in the data of Figure 2. Occurring sometimes before and sometimes after the lowest point of the arbitrary curve, it is usually smaller than the two main peaks and more variable in time. At about the year 600 and again at 1000 it seems to be doubled.

It should be remembered that this system of six 400 year epicycles, each with three peaks is only our interpretation of the curve. It is possible that there is an interacting set of independent cycles. In view of the short length of time involved (even though it is most of recorded history!) it seems wiser not to apply too sophisti-

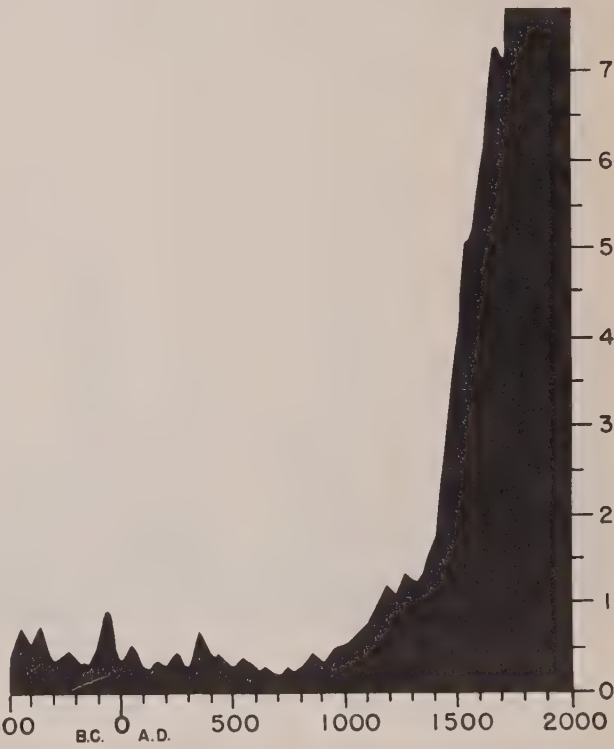


Figure 1. Census of famous men and women of the Western world by decades. Names from the *Columbia Encyclopedia.* The curve is arbitrarily cut off at 1700.

cated an analysis to the data.

The reader may wonder why the series stops at the year 1750 when it is the last two hundred years that is of the greatest interest to most of us. It is unfortunately the case that where the data is the most interesting it is also the weakest. It is in this most recent period that the "real" figures become obscured by the desire of the compiler to include not only the names of important people but also a large number of names of those whose present reference value warrants their inclusion and who will eventually vanish with the passage of time. There is a different standard applied, and correctly, to those who lived in the nineteenth century and those who lived in the ninth. It is this fact which renders our method useless for evaluating modern trends.

Anyone may, of course, extrapolate our curve if he feels sufficiently curious. Such extrapolation will indicate that the ascending limb of the next (seventh in our series) epicycle should have started before 1850 and be reaching the first of its double peaks about 1950. The second peak would be reached about 2050. There is absolutely no reason to believe that such will be the facts. There is even less likelihood that we will be able to detect the peaks even if they arrive on the extrapolated schedule. Greatness is not always recognized in its own generation.

It will have occurred to the reader that we seem to have erected a considerable fabric upon a single list of names quite subjectively selected. We have not, in fact, relied solely upon the list from the *Columbia Encyclopedia*. A number of similar lists have been examined and graphed in the same way. Among other sources are the names included in the *Encyclopedia Britannica* and the *Webster's New International Dictionary*. Several older lists dating back to the sixteenth century have also been plotted.

Agreement of names *in detail* from one list to another was far from perfect. Relative heights of peaks and troughs varied from one count to another Even where congruence of individual names was the poorest, however, *the essential cycle lengths that we have described remained unaltered.*

Assuming that our measurements are reliable, that is, that they are repeatable, we come to the question of what it is that our curves are measuring. We are directly counting the number of persons who, by their own or other's efforts, have been remembered enough to be included in a compilation of noteworthy individuals. By no means are all able men remembered or all remembered men able. No name attached itself to the inventor of the wheel or the sailing ship yet most biographical dictionaries include the name of the King of Rome and Duke of Reichstadt whose name is known only as the helpless and short lived son of Napoleon.

Only as a possible and probably the sole indicator of real fluctuation in human ability do we present these curves. How good is the relation between them and "reality" is more open to argument than to proof. We cannot, at present, make any statement as to possible causes underlying these apparent cycles. Being biologists we are inclined to view them as endogenous variations in the genetic make up of man rather than the result of external factors such as climate or cosmic radiation.

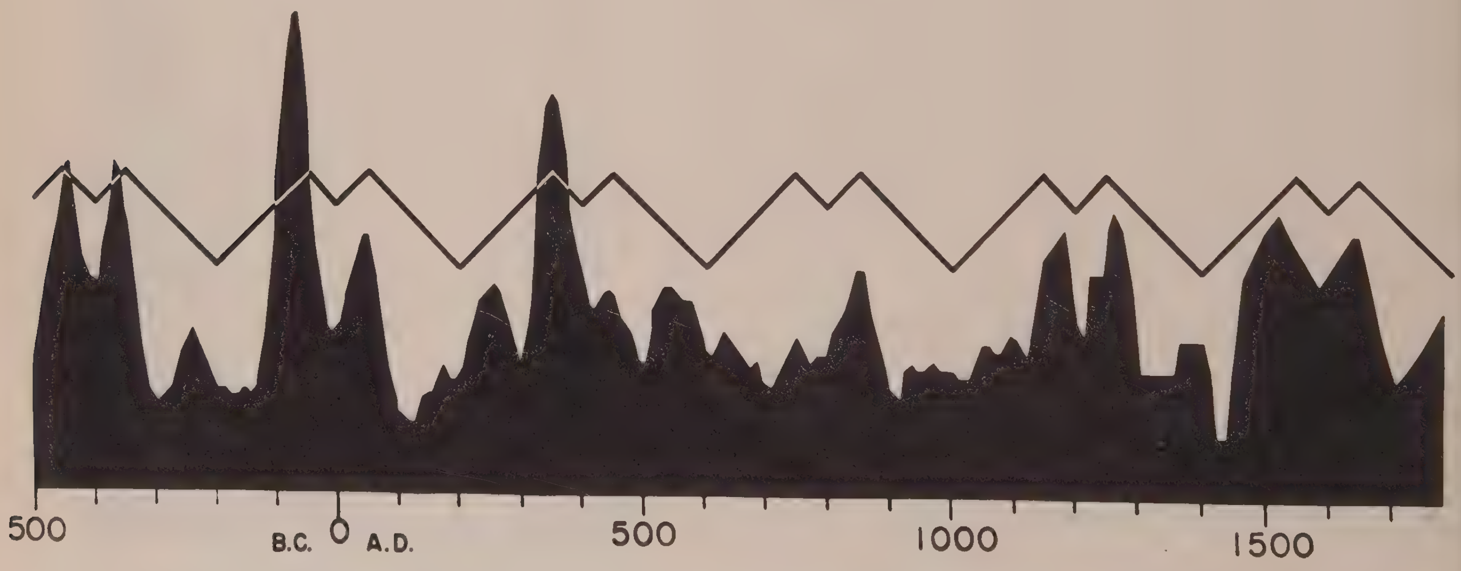


Figure 2. The same data as figure one, but plotted to the secular trend line as a base line. An ideal 400 year split-peak cycle is drawn above the data for comparison.

THE USE OF CYCLES IN FORECASTING COMMODITY PRICE CYCLES

BY DAVID WILLIAMS

> *"Prediction must inevitably fail, unless we have lighted on the true cause of the phenomena; success is therefore, a guarantee of the truth of the theory."*
> *Prof. G. H. Darwin*

Prices of commodities have been of universal interest from the very earliest times, and changes in prices of basic commodities are one of the most important forces in shaping our economy to-day. Since prices are ever changing, a knowledge of the laws of prices is essential for personal business success, because every business transaction involves a guess as to the future of prices. Prices normally are determined by the law of supply and demand, i.e., when supplies are ample, prices are low, and when supplies are scarce, prices are high. Drastic changes in the volume of the purchasing media, be it gold, silver, or paper, will of course upset the normal functioning of the law.

DAVID WILLIAMS

Joseph

The most dramatic instance of the operation of the law of supply and demand is recorded in the famous biblical account of the seven fat years and the seven lean years. As you may remember, Joseph, in interpreting Pharaoh's dream, advised him to store up surplus food during the seven years of plenty, so that there would be ample food available during the succeeding seven years of famine. This was done, and during the famine years, food was sold at high prices, first for cash, then for cattle and other animals, and finally for the land itself!

Other Investigators

Joseph was able to predict the future thru his rare gift of dream interpretation, but we moderns, who do not possess such a gift, must resort to other methods of forecasting the future of commodity prices. One of the most useful methods, is the study of past price movements to determine if there is some rhythmic pattern that could be projected into the future with a reasonable degree of accuracy. A vast amount of work along this line has been done during the past one hundred and fifty years by scientists thruout the world. The early investigators attempted to link crop cycles to sunspot or weather cycles. Thus, the famous English astronomer Sir William Herschel in "Philosophical Transactions" (1801) attempted to show that years of remarkably abundant or deficient spots have also been remarkable respectively for their high or low general temperature, and especially abundant and deficient harvests, with resulting changes in crop years.

In 1875, Prof. W. Stanley Jevons of the University of Manchester elaborated on Herschel's work in "The Solar Period and the Price of Corn". N. R. Pogson, another English astronomer, in the "Indian Famine Bluebook, 1881", traced an intimate connection between sunspot frequency, rainfall, and grain prices in Madras, India. In 1918. Prof. H. L. Moore, of Columbia University, in "Economic Cycles", advanced the theory that crop cycles are caused by rainfall cycles based on the 8-year Venus cycle. In 1922, Sir William H. Beveridge stated that many regular periodic movements affecting weather and crops may be accounted for thru similar oscillations of the sun, moon, or even the planets.

In 1926, N. D. Kondratieff, Director of the Conjuncture Institute of Moscow, Russia, published an article which was translated into English in 1935, in which he announced a regularly recurring cyclical undulation indicating a forty to sixty year wave length in various basic production series or price data, based on studies undertaken about 1920. Other economists who have written on long waves in the movements of economic factors are:- Van Gelderen 1913, S. de Wolff 1924, W. S. Woytinski, 1931, F. Simiand 1932, Warren & Pearson 1933, F. Kuczinski 1934, and Dewey & Dakin 1947.

Dewey, in *Cycles, The Science of Prediction* fixes the Kondratieff wave at 54 years for U. S. Wholesale Prices from 1790 to 1945. The time interval between the peaks of the Revolutionary War and the War of 1812 is 35-3/4 years, between the War of 1812 and the Civil War 49-1/2 years, between the Civil War and World War I 55-1/2 years, and between World War I and the current peak 35 years. If the price index is converted to a gold basis from 1934 on, it is still possible for the next peak to come around 1979. The ideal highs fall in 1763, 1817, 1871, 1925, 1979, etc., the lows in 1790, 1844, 1898, 1952, etc.

Another major commodity price cycle is the 9-year or Juglar cycle. The three great wartime price peaks, i.e., the War of 1812, the Civil War, and

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*A condensation of a talk given by Commander Williams before the New York Chapter of the Foundation for the Study of Cycles at its February 26, 1958 meeting, Hotel Alden, New York.

Commander Williams is Vice President of the Chapter.

World War I, occurring near the crest of each of the 54-year rhythms, came at the top of the 9-year wave which rides the longer rhythm. The combination of three forces - the upsweep of the 54-year wave, the upsweep of the 9-year wave, and the incalculable force of WAR - provided a leverage of great intensity.

Wheat

The longest consecutive price series is that of English wheat, which goes back to 1260 A.D. The data were assembled by J. E. T. Rogers in a seven volume "History of Agriculture and Prices in England". Dewey adds a regular 54-year cycle and states, "A rhythm that has repeated itself as many times (13-1/2) and as regularly as this one cannot easily be the result of pure chance."

In 1953 there was discovered a 9.3-year cycle in wheat prices from 1859 to date. The current cycle is ideally due to bottom out in February 1960. There is, however, no guarantee that the actual bottom will come at that time.

Corn

In 1875, Samuel Benner discovered a 5-1/2-year cycle in corn prices, which has been coming true ever since. Corn prices have been downward since September 1956, whereas the ideal cycle called for an upward trend until April 1958. This is evidently one of the times when the cycle does not manifest itself. The cycle has prevailed 16 times out of 20 since 1899.

Pig Iron

It is interesting to note that in 1875 Samuel Benner discovered a 9-year cycle in pig iron prices. Subsequent research set the average length of the cycles as 9.2 years.

Cycles for September 1956 shows a synthesis of the ideal 17-3/4, 9.2, and 8.5-year cycles, plus a preliminary estimate of trend and the inflation factor projected at its 1953 level, which indicates a peak from the first quarter of 1956 thru the third quarter of 1957, to be followed by a decline to the 4th Quarter of 1960.

Copper

Copper prices act as if they were influenced by a number of cyclic forces, of which the two most important are cycles 9.3 and 8.6-years long respectively. These two cycles are present concurrently in the figures from 1784 to date. The 9.3-year cycle was first observed in 1947.

During 1953 and early 1954 there were isolated and projected five cycles in copper prices having the following lengths:—32.36 months, 8.6 years, 9.28 years, 12.53 years, and 14.8 years. The synthesis calls for a retracement of about one-half the rise from 1954 to 1956 by the 3rd Quarter of 1957, with a recovery of one-third by the 3rd Quarter of 1958, followed by a decline thru the 3rd Quarter of 1960 which would bring prices below the 1954 level. The actual decline, however, has been so drastic, (Producers price down from 46¢ to 25¢ and L.M.E. price down from 55¢ to 20¢), that it would appear to this writer that the decline to 1960 has already been discounted. He would, therefore, expect the next major change in copper prices to be upward.

Cycles for September 1957 describes the major undulations in U.S. copper prices (measured in gold dollars) as averaging 54 years from crest to crest. The actual time interval between the crests of 1814 and 1864 is 50 years, and that between 1864 and 1917 is 53 years. Dewey states, "The 54-year cycle in copper prices is real, in that it has actually occurred. However, our series of figures is so short that this cycle has had a chance to repeat but three times. Three waves are so few that they could easily come about as a result of chance. On the other hand, the fact that a 54-year cycle has been found in wheat prices back to 1260 (697 years; 13 repetitions) gives weight to the idea that the 54-year waves in copper prices are the result of a basic 54-year cycle force which will continue,"

In *Cycles* for January 1958 Dewey lists the six cycles thus far discovered in copper prices as follows:—

Length	Average % Above Trend at Time of Ideal High	Date of Ideal High
32.36 Mo.	2.33%	1958.4
8.60 Yr.	11.9	1950.8
9.28 Yr.	14.3	1956.0
12.53 Yr.	8.4	1953.0
14.80 Yr.	5.7	1960.7
54.00 Yr.	39.0	1971.8

Only the first five cycles were used in the foregoing synthesis.

Conclusion

Prices are subject to a variety of forces, i.e: (a) long term growth trend, (b) inflation, (c) random events such as war, tariff changes, price control, etc., and (d) cyclic forces. The researches of the Foundation for the Study of Cycles are directed toward developing a better understanding of the cyclic forces that have been observed in the natural and social sciences. Much valuable information has been obtained, but a great deal more work must be done before cycles can be put to work for the benefit of Mankind.

CYCLES--FACT OR FICTION --FREE RIDE OR DISASTER?*

BY JOSEPH EARL PERRY

Out of the whirling star dust, earth;
Out of earth, life;
Out of life, growth;
Out of growth, man;
Out of man, a glimpse of God.

JOSEPH EARL PERRY
President, Newton Savings Bank

There, in 26 words is my version of the history of our universe—down to two o'clock this afternoon. That is not a very garrulous history and, admittedly, leaves out a good many details to be found in even so condensed a story as H. G. Wells' "Outline of History."

Because my "history" is so abbreviated, and because the period covered is so vastly beyond human comprehension, perhaps a further analysis will help to bring things into perspective. Thus, if the length of time since life first appeared on our planet were to be represented by the height of the Empire State Building, then, by that time scale, the time that human beings have existed could be represented by the thickness of a five-cent piece on top of the Empire State Building; and the time that civilized man has existed—say from the Bronze Age to the present—could be represented by the thickness of a piece of tissue paper; and the age of the United States Government could be represented by a very light pencil mark on the tissue paper, on the five-cent piece, on the top of the Empire State Building. However, the period you are invited to consider in the first instance would be only 1 or 2 per cent of the thickness of that pencil mark, for we shall try to approach our subject in the light of some of the developments of only the last few years.

Time Expanded

Not too long ago, there was a widely held belief that the age of the universe was about 5,000 years. To-day our scientists think they have credible evidence that the universe must be several billions of years old. Give or take a few billions either way, and most of them would settle for about 6- or 7- billion years. Every one of those years is composed of days and hours and minutes and seconds, and that was about as small a division of time as the world knew until recently. Now, however, our scientists have expanded time in both directions, for they have not only expanded 5,000 years to several billions, but they have also vastly subdivided the seconds. An increasing proportion of the world's business is done on a basis of milliseconds, or one-thousandths of a second; and radar and similar operations think in terms of microseconds, or billionths of a second. The most accurate timepiece known to man is based on the oscillations within a molecule of a certain chemical estimated to be at the rate of some 15-billion per second. Moreover, the precision of those incredibly rapid oscillations is so great that it is believed the clock would not gain or lose more than 1 second in each 300 years.

Space Expanded

Just as time has been extended in two directions from the incredibly vast to the incredibly small, so our conception of space has likewise been expanded both to the incredibly vast and to the incredibly small. The electronic telescope and the electronic microscope have enlarged our known universe so we can see objects so distant that it takes their light in the order of a billion years to reach us, all the while traveling at the rate of more than 186,000 miles per second. At the other end of the scale, even our densest solids have been found to be composed of atoms within which tiny substances revolve with unbelievable rapidity in their appointed orbits. The relation between the size of these tiny specks and their orbits has been compared to that existing between the heavenly bodies and their orbits. Stated another way, even our densest solids are been likened to a solitary speck of dust floating around in a large auditorium.

Knowledge Expanded

These recent expansions of time and space are but parts of the general pattern of the expansion of human knowledge both in the direction of the number of our spheres of interest and also in the depth of knowledge which research and scholarship have provided in each of these many spheres. Both in range and in depth, man's horizons have expanded immeasurably. Since each new achievement is a potential stepping stone for the next, this widening of interest and increase in knowledge has been continuously accelerating, and the future beckons with inconceivably greater promise. The world of the mind has been expanding with an explosive speed resembling the mushroom cloud following an atomic explosion.

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*This article is reproduced by courtesy of United States Investor where it appeared March 23, 1957. Copyright 1957 by Frank P. Bennett & Co., Inc. Mr. Perry is President of the Newton, Massachusetts Savings Bank.

Veritably, we are living in the most fascinating and the most crucial era yet known to men.

The inevitable accompaniment of these new discoveries and developments is an era of change. The world of nature and the worlds of all living things except man may remain unchanged, but in man's world nothing can long remain as it was. Whatever else this may prove to be, it is certainly a time of universal changes; and all men and all human institutions must recognize that fact or perish. But how can men keep their feet when the very foundations are changing, and how can they act wisely when even the criteria for forming sound judgments are fluid and volatile? Perhaps there is no satisfactory answer to that question; but if there is, it probably involves the ability to see things in their true perspectives.

Perspective Difficult

Time was when most people would agree that "seeing is believing," and most of our daily living is based on that premise. But let us put that to a simple test. Keeping your eyes open, place your hand close to your eyes. In this position, if "seeing is believing," you would have to believe that the whole universe consists of only your own hand. Now move your hand slowly away from your eyes and see how it dwindles in size and other things begin to appear. If you were able to detach your hand and move it far enough away, it would entirely disappear from sight. At what point can you be sure of the real size of your hand?

Just as the size or importance of physical objects seem dependent on nearness or remoteness, so, too, events and emotions loom disproportionately large while close at hand. Today's headlines may be forgotten tomorrow, but today they seem the most important things in all history. Today's sorrows are more easily borne, its triumphs more wisely met, its problems more sanely solved if seen in perspective.

But sometimes this matter of distance seems to work in reverse, and the more distant view is less reliable than the one near at hand. Thus, if you should stand by the side of a road leading straight to the horizon in each direction, you might see a distant speck visibly growing as it approached until it became an immense motor truck, and, as it receded, it would then dwindle away into invisibility. If you were to believe your eyes, you would have to believe that the truck constantly changed in size and never retained the same size more than an instant at a time. In this illustration, the mind tells us that the size of the truck remains unchanged and that the nearer view is the correct one while the others are distorted by distance and motion.

Judgment Needed

Apparently, in this world of change, we can never rely solely on the obvious. If seeing is to be believing, then it must be seeing by a mental eye capable of judging things, or events, or statistics, or trends in true perspective rather than by appearances alone. Because too myopic a view is likely to be unreliable, it is usually true that the longer the perspectives, the better. Sometimes, however, the longer the road has been straight, the more imminent will be the next turning; and at close range it is hard to distinguish between a minor meandering and a permanent change of direction.

The earlier reference to the extremely long and the extremely brief measurements of time was not merely fanciful. If we, as human adults, watch the pendulum of a grandfather clock, we know that it rhythmically reverses its direction in an unchanging pattern. But suppose our life span were measured only in milli-seconds, or in microseconds, and all our lifetime we had seen the pendulum travel in but one direction, then we and all our scientists would insist that the pendulum could move only in that direction. But if our life span happened to occur at a time the pendulum changed direction, we would presumably think the change was a permanent one and the pendulum would never resume its previous direction. Now, let us lengthen our imagined life span to two reversals of the pendulum, then to three, to four, and so on. At what point would we be justified in banking on a rhythmic, dependable repetition of directional changes?

Cycle Problem

In a sense, that is the problem of trying to understand and assess the business cycles. How many repetitions need there be before we are justified in concluding that we have come upon a genuine cycle? If the demand for bathing suits at a shore resort coincides with the arrival of summer, year after year, the concessionaire who rents bathing suits would very speedily seem justified in believing there was a dependable business cycle to reckon with. If he bought his concession in the late spring, he might expect a free ride on the business cycle; but if, about Thanksgiving Day, he invested his last penny in the concession, he might properly expect the cycle to spell disaster for him. At that time of year, a skating rink might be a better buy.

The trouble with business cycles is that they are not so clear-cut as the swinging of a clock pendulum or the changing of the seasons, nor are they so clearly obvious.

Take a thing as inevitable as ocean tides. We know that they are influenced by the forces of gravitation. But that is not the only factor affecting the height of the tide. At some points along the southern shore of Nova Scotia, there may be a normal tide of about 4 feet; but perhaps 50 miles north of there on the other side of the peninsula, the tide in the Bay of Fundy may run 10 times as high.

It is the same ocean, and the forces of gravity are the same in each case. We ordinarily consider that the moon causes the tides, but that is only partly true. There are literally billions of stars and planets and other heavenly bodies, and every single one of them exerts some pull on the ocean and affects its tides. Some tend to cancel each other out, others supplement each other, some are so feeble as to be imperceptible, while the moon is so dominant as to seem to be almost the sole factor, but it really is merely but one of billions. Nevertheless, the tides can be computed and predicted with amazing accuracy for long periods ahead.

Solution Available

Let us try to draw together the threads of this discourse by suggesting, first, that there lies behind us the record of an extraordinarily long human experience and an almost infinitely longer record of the natural world; next, the explosive expansion of human knowledge and the scientific research of recent years are beginning to put in our hands the means of reading and interpreting the long record of human experience.

For instance, it is already possible to trace certain well defined patterns of weather for some thousands of years and to see corresponding patterns in human behaviour as widely varied as art, music, culture, warfare, and the like. Already we can trace an apparent correlation between human behaviour and the recurring variations in the radiations from the sun. Fantastic as these assertions may seem, they are authenticated far beyond the realm of mere coincidence.

That human behaviour—whether in the mass or individual—is never static for long but is always changing is readily accepted as fact. Like the waves on the surface of the sea and the swelling and ebbing tides, there are certainly a wide variety of sweeping movements in human affairs from changes in styles of clothing and quotations in the stock market to virtually every other aspect of human life. That these variations exist is clearly fact, but to assert that they can all be proved to follow definable cycles is still fiction. Perhaps they do, but thus far we cannot discern the patterns well enough to predict future events very clearly. In some fields closely connected with the seasons, prediction can be fairly accurate. So, also, the broader trends and swings in the business cycle can be forecast within the range of reasonable probability

In many a field, one can predict with reasonable assurance that a pattern which has repeated itself perhaps 15 or 20 times in succession is likely to keep on repeating itself. Within that range can be found recurring cycles, roughly in multiples of 3 years, all the way up to 54 years, and, with diminishing assurance, in multiples of 54 years up to perhaps a 1,000 years. However, the longer the cycle, the fewer the observed repetitions.

What this amounts to seems to be that enough has been done in the realm of cycle research to indicate an extraordinarily fascinating and tantalizing field of enquiry and one whose secrets may well be probed by modern methods of observation, and analyzed and mastered through the amazing capacity of the new data-processing devices.

Work Just Started

The danger thus far would seem to be in trying too soon to ascribe too much to the science of cycles. If one were to ask, "How tall is a minute?", "What color is North?", "How fast is a ton?", "In which direction does time go?", it is obvious that no sensible answer is possible. Similarly, we can ask questions about cycles that do not and cannot make sense, but if we keep our sense of proportion and use the vast resources of human research to give us factual data and utilize the fullest potentials of human judgment to give us sound perspectives, we can turn much of the fiction into fact in the realm of business cycles. There are few, if any, more fascinating fields for the business man to study. Few can be more rewarding if truly mastered. In more ways than one, the study of business cycles may spell the difference between a free ride and disaster.

It was wisely said, "There is a tide in the affairs of men which, taken at the flood, leads on to fortune; omitted, all the voyage of their life is bound in shallows and in misery; and we must take the current when it serves or lose our ventures."

In that quotation, Shakespeare recognized the existence of cycles, but did not attempt to tell how they could be identified or predicted. Three centuries later, we have made only a fair start toward the science of identifying and predicting cycles; but the means for so doing are quite recently becoming available. Whether, and when, they will be utilized will depend primarily on how important it seems to do so.

Steps Toward Solution

The means of obtaining such an objective would seem to be three-fold; namely, gathering the myriads of pertinent facts, analyzing and assigning their respective weights, and computing the results of their interplay on each other. Human judgment will play a great part in the first two steps; but the new computers now available can, for the first time, perform the third step and go far toward rectifying human error in the first two.

It is fascinating to speculate on the factors that should be fed into a cycle computer. There would be all sorts of influences from the natural world ranging from weather and sunspots to the advancing and receding polar icecap every few thousand years. In the human sphere, there will be a bewildering array from individual psychology to international mob psychology. In industry, there will be the effects of new inventions and processes, of rolling recessions and recoveries, of exhaustion of certain resources and utilization of substitutes, of changing demands, and a host of others. In finance, all of these factors plus the supply and velocity of currency, the demand and supply of credit, the rise and fall of confidence, and a variety of other influences will have to be assembled, analyzed, weighted, and computed.

Bewildering? Yes. Difficult? Yes. Impossible? No. In a sense, every one of us, in almost every activity of life, is doing all of these things to some more or less conscious extent. In the bank, when we stagger the maturities of our government bonds, or watch the degree of our liquidity, or the size and quality of our surplus, or even when we order equipment and supplies, we are recognizing fluctuations which we think may follow certain patterns. That we do think so is at least a dim recognition of the belief that cycles may be more fact than fiction and indicates a very genuine preference for a free ride rather than disaster.

We stand on the threshold of a new economic world. We have within our reach far better facilities for a wiser approach to that new world. The past instructs; the future beckons; but we—you and I—must take the initiative if we would discern the cycles and harness them for our use.

We are so clearly in the earliest stages of the mastery of the science of cycles that there is real danger in assuming and expecting too much from it. But that has been true of the earlier stages of every new advance. In some areas, it seems indisputable that cycles, or recurring patterns, are fact even if we cannot yet forecast their extent or frequency. In other areas, what may seem to be rhythmic patterns may be little more than coincidence or plausible fiction. In still others, genuine cycles may be temporarily distorted or even cancelled by random influences, These are some of the factors that make the science of cycles so baffling yet, withal, so intriguing.

At the present time, our supposed knowledge of cycles is both fact and fiction, free ride, and disaster; but it lies within our power to eliminate much of the fiction and avert much of the disaster whenever it seems worthwhile to spend the necessary effort really to master the science of cycles.

CYCLES IN ROCK STRATA

Paired Beds of Calareous and Argillaceous Mudstone
that Record the 672 Year Climatic Cycle

The Cycle Round-up

AUGUST 1958

In this month's Round-Up we are giving special attention to three subjects:

Corn Prices . . . Page 202

The *ideal* 67 1/3-month cycle has a peak at April 1958. The *actual* peak apparently will come at a later date.

Residential Construction Contracts . . . Page 205

The *ideal* 32.3-month cycle had a peak at March 1958. It is now on the way down to a low due ideally at July 1959.

Unemployment . . . Page 206

The latest available figures are added to the seasonal chart.

The recent figures for the various other series which have been covered by complete stories in previous issues follow.

Aluminum Production

Aluminum production in the United States has been dominated by a very steep growth trend and a fairly regular 6.4-year cycle.

The 6.4-year cycle is now in a downward phase toward a low due ideally at 1959.5. At the low point the cycle is 79.4% of trend, on the average.

Recent monthly aluminum production figures are:

1958 - Jan. 139.9 thousand tons
Feb. 122.0
Mar. 134.0
Apr. 125.0

This is domestic production of primary aluminum.

Average monthly production during 1957 was 137.3 thousand tons per month.

Automobile Factory Sales

The combination of 4 cycles so far isolated in the factory sales of automobiles is moving sideways at the present (no up or down).

Recent monthly figures are:

1958 - Mar. 359 thousand cars
Apr. 322
May 350 p

Bond Yields

The 54-year cycle in bond yields is currently going up toward a peak due ideally at 1978.

Recent monthly yield's for all domestic corporate bonds as published by Moody's are:

1958 - Apr. 4.02 %
May 4.00
June 3.98 p

Copper Prices

The combined cycles in copper prices had a peak due ideally in the second quarter of 1958.

The actual price of electrolytic copper at New York recently has been:

1958 - Apr. 24.25 cents per pound
May 24.30
June 25.80p

Egg Prices

The 26.5-month cycle in egg prices is now on the way down to a low due ideally at March 1959.

The low of the seasonal cycle is at May, after which the cycle turns up toward a peak due in October.

The price of eggs, extras, large, wholesale, at Chicago for the past few months have been:

1958 - Mar. 43.4 cents per dozen
Apr. 38.0
May 36.0

Liabilities Of Business Failures

The combination of the 5 cycles we have isolated in the liabilities of business failures with the underlying trend is upward at the present time. The odds are that liabilities will be higher in 1958 than in 1957.

Recent monthly figures are:

1958 - Mar. 71.6 million dollars
Apr. 84.0
May 56.2

Stock Prices

See the story on the 7-year cycle in the Combined Stock Price Index. The Combined Index for recent months has been:

1941-43 = 10

1958 - Apr. 42.34
May 43.70
June 44.70p

Sunspot Numbers

See the research story on sunspot numbers on page 185.

Recent monthly sunspot numbers are:

1958 - Feb. 152
Mar. 189
Apr. not yet available

Wheat Prices

The dominant 9.3-year cycle in wheat prices is now on the way down to a bottom due ideally at February, 1960.

Actual wheat prices have been moving sideways within a small range for the past 2 years.

Recent monthly prices of No.1 Dark Northern Spring Wheat at Minneapolis have been:

1958 - Mar 238.3 cents per bushel
Apr 241.7
May 243.3

COMMENT

You understand, of course, that the facts we give you are *not* forecasts. Our work tells you merely about cycles. These cycles are facts that you should have in order to outguess the future. However, by themselves they often give you a better idea of the future than forecasts by regular forecasters. We are the only source from which these facts can be obtained.

G. Shirk

CORN PRICES

Corn prices appear to be dominated by a 67 1/3-month cycle. The *ideal* curve of this cycle has just passed a peak scheduled for April 1958 and is on the way down toward a bottom due ideally at February 1961.

The original work on this wave was done with yearly figures, and the cycle was called a 5 1/2-year wave.

A picture of the performance of the wave in the yearly figures is given across the bottom of the page. As you can see, you have to regard any single wave as only one part of the total picture.

This cycle was first mentioned by Samuel Benner in 1875 and the period since 1875 is marked off on the yearly chart below as "How It Came Out."

The yearly work was refined by using monthly figures and the result reported on in *Cycles* for July 1957.

In that analysis we built an imaginary gain-loss table by using the ideal high and low turning points as buy or sell, short or cover dates. Using the actual price of corn which prevailed at these ideal times we developed 20 possible transactions, 16 of which were profitable.

Of course our table did not include the ideal April 1958 peak because the actual price had not yet occurred. We have now added the actual April price to the table and completed one more transaction.

This last transaction showed a loss of 13%. The total gain shown by the table for the entire period 1899 forward was reduced from 1158% to 1145%.

The gain-loss table with the new transaction added is given on page 204.

Although it is disappointing to have the current transaction turn out to be a loss, the total gains for the entire period average 19% a year. The table is deliberately set up according to the rigid cycle schedule and of course the actual highs and lows of the cycle usually occur before or after the ideal time.

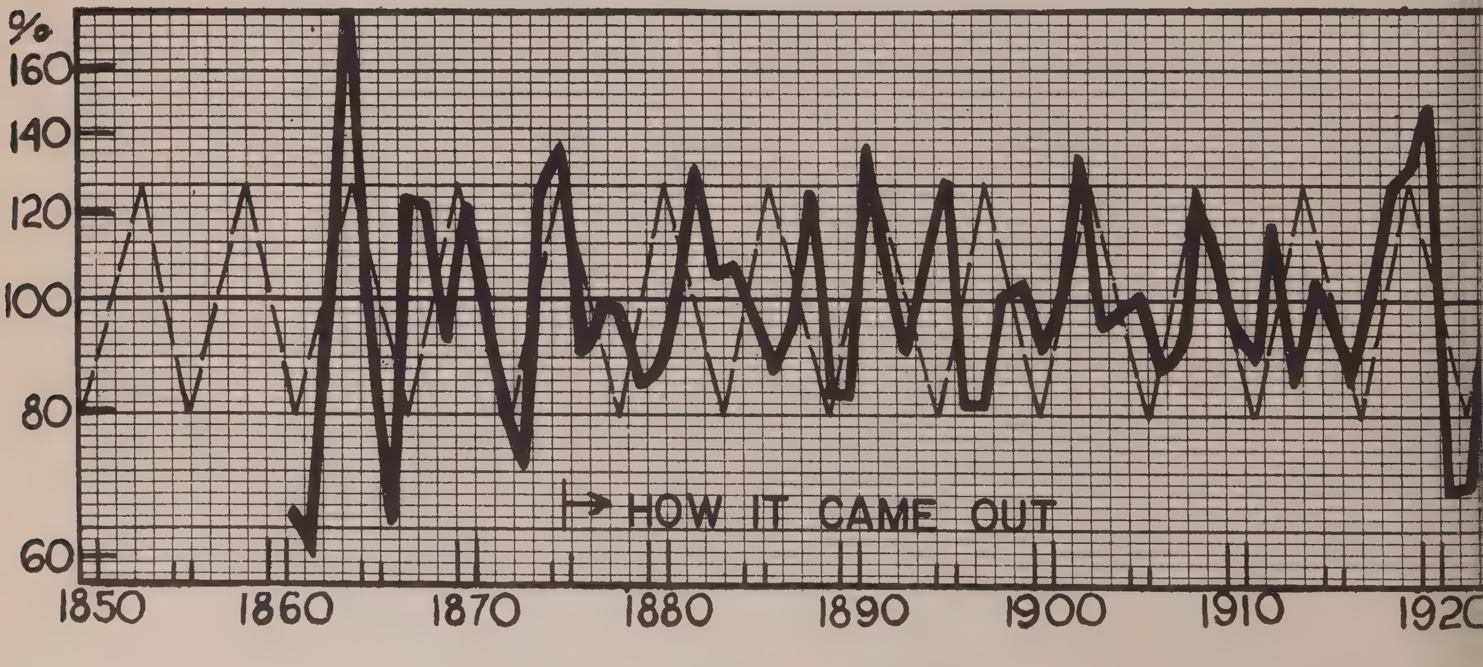
Furthermore, the 67 1/3-month cycle is the *only* factor we have considered in the gain-loss table.

We attempted to develop a more realistic picture by setting up the limits within which the actual peak would probably fall. These limits were established by tabulating the past relationship between the ideal peak and the actual price.

Percentages above trend for each of the 10 ideal times of high (before the April 1958 addition) were figured and were applied to an estimated value of the underlying trend for April 1958.

The result is given in the following table.

A Trend April 1958 Estimated	B Percentages of Trend at Ideal Times of Crest	C Projected Prices (A X B)
$1.38	146	$2.01
1.38	130	1.79
1.38	123	1.70
1.38	116	1.60
1.38	114	1.57
1.38	109	1.50
1.38	103	1.42
1.38	94	1.30
1.38	93	1.28
1.38	89	1.23



It now appears that the estimated underlying trend value of $1.38 was too high.

However, using $1.38 as the underlying trend value, the odds were 6 to 4 that the price would lie between $1.30 and $1.70 at April 1958. The actual price was $1.29.

Using an additional year of figures we have revised the underlying trend, and it now appears that the trend for April should have been nearer $1.19 which would have changed the range to $1.12 to $1.46.

It is unfortunately the nature of trend that you do not know what it is until after you have passed it.

Although we have passed the April peak and cannot change the trend we used in defining our limits for the April peak, we can use the revised trend to change our estimate of the probable picture at the time of the next trough.

In addition to the limits on the level of price which would probably prevail we figured the probable *timing* of the actual crest. The odds are 5 to 4 that the actual crest of the present move will fall between May 1957 (11 months before April 1958) and March 1959 (11 months after April 1958.

Apparently we have not yet reached the actual peak for this swing of the cycle.

The recent record of the wave compared to the actual price of corn is shown on the chart on page 204.

The actual price of corn is drawn on the chart as the solid line.

The broken line on the chart shows the 67 1/3-month cycle combined with the revised underlying trend. The revision of the trend tilts the broken line more sharply downward than formerly. The main result of the revision is to lower the level of the ideal bottom scheduled for February 1961.

Small boxes have been drawn on the face of the chart to show the limits both for the peak we have just passed and for the next low.

The box outlining the limits for the April peak is based on the previous trend as used in June 1957.

The box outlining the limits for the next low is based on the revised trend.

The odds are 6 to 4 that the price of corn at the next trough of this wave will lie between $0.78 and $1.20. The underlying trend at February 1961 is now estimated to be $1.15.

The odds are 2 to 1 that the low due ideally at February 1961 will fall between October 1960 (4 months before February) and June 1961 (4 months after February.)

When we consider the past behavior of this cycle, actual versus ideal, and translate the relationship into odds for future developments, we get the possibilities as defined by the boxes on the chart on page 204.

The recent monthly price of No. 3 yellow corn at Chicago has been:

Month	Cents Per Bushel
1958 - Apr.	128.8
May	131.1
June	136.1p

For more detail about this study see "What's Ahead for Corn Prices" in *Cycles*, June 1957.

G. S.

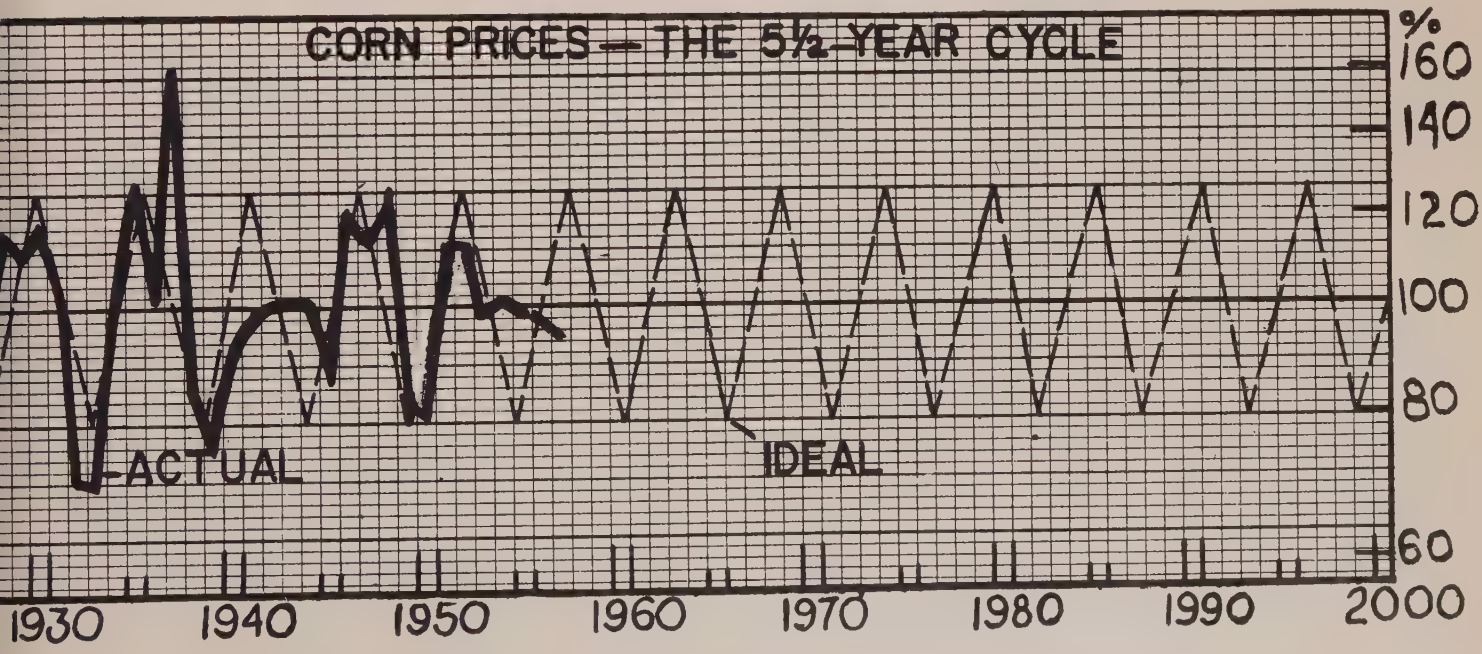


TABLE 1

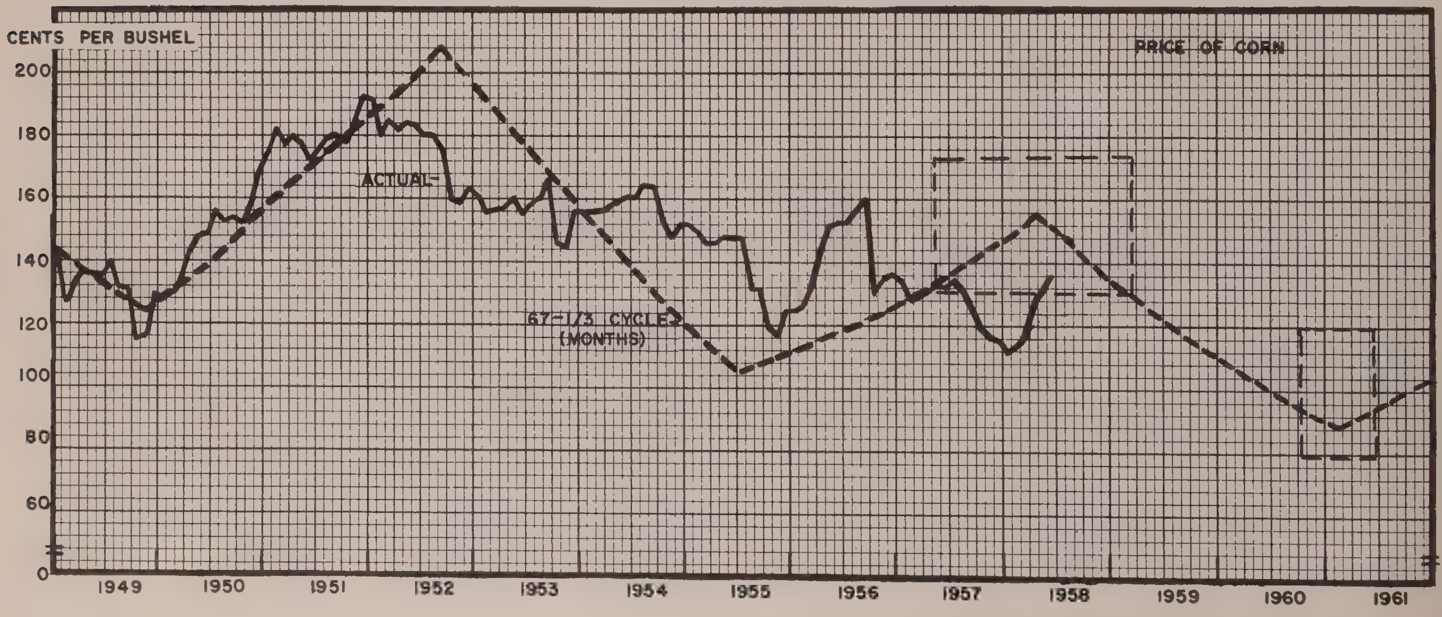
Imaginary Purchases, Sales, and Short Sales of Corn on Basis of 67 1/3-Month Cycle, May 1899—March 1957

(Short positions covered during war)

Month of Ideal Highs & Lows	Cash Price Corn - Cents Per Bushel at Month of Ideal Cycle High & Low				Gain or Loss			
					In Cents		Per Cent	
	Buy	Sell	Short	Cover	Long	Short	Long	Short
May 1899	33							
Mar. 1902		59	59		26		79	
Jan. 1905	42			42		17		40
Oct. 1907		65	65		23		55	
Aug. 1910	64			64		1		2
June 1913		60	60		-4		-6	
Mar. 1916	73			73		-13		-18
Jan. 1919		143	143		70		96	
Nov. 1921	47			47		96		204
Aug. 1924		117	117		70		149	
June 1927	99			99		18		18
Apr. 1930		82	82		-17		-17	
Jan. 1933	24			24		58		241
Nov. 1935		62	62		38		158	
Sept. 1938	53			53		9		17
June 1941		74	74		21		40	
Dec. 1941[1]				76		-2		-3
Apr. 1944	116							
Feb. 1947		142	142		26		22	
Nov. 1949	116			116		26		22
Sept. 1952		176			60		52	
July 1953[2]			158					
July 1955	147			147		11		7
Apr. 1958		128	128		-19		-13	
						Total	615	530
					Grand Total		1145	

[1] Short position covered at beginning of war.

[2] Short position established at end of war.



RESIDENTIAL BUILDING CONSTRUCTION

Residential construction contracts awarded are dominated by a seasonal pattern, and a 32.3-month cycle. When these two cycles are added to the underlying trend we obtain a "synthesis" which is diagrammed by means of the broken line on the chart below.

The actual contracts awarded are recorded by means of the solid line.

March, April, May, and June are the high months of the year in the seasonal pattern.

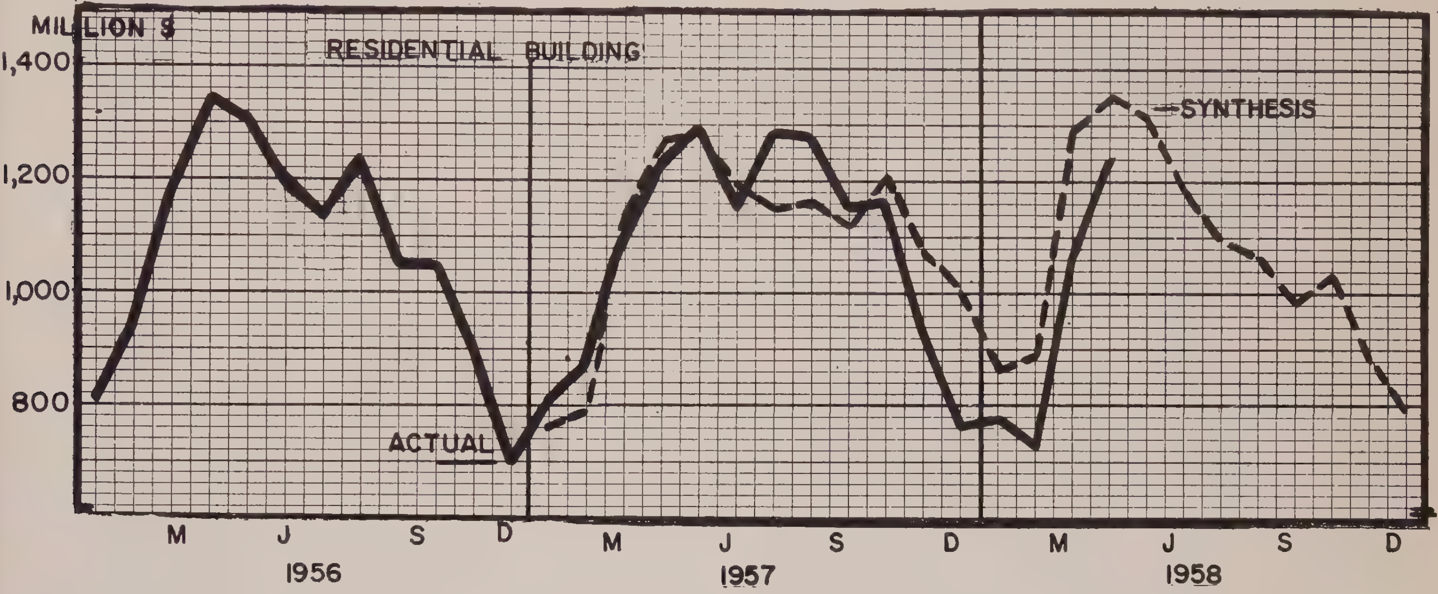
The 32.3-month cycle had a peak in March of this year and is now on the way down to a low due ideally at July, 1959.

The underlying trend we are using is going down at the present time. Although it is a matter of judgment, it is likely that the underlying trend we are using is not going down as steeply as it should.

Recent actual monthly figures follow.

Month	Contracts Awarded Million $
1958 - Jan.	777
Feb.	727
Mar.	1,071
Apr.	1,240

For more detail see "What's Ahead for Residential Building Construction?" in the November 1957 issue of *Cycles*.



We are frequently criticized for not showing enough back-up. People complain that although the residential construction contracts chart looks fine, it is not possible to judge from it alone just how well the 32.3-month cycle has performed in the past.

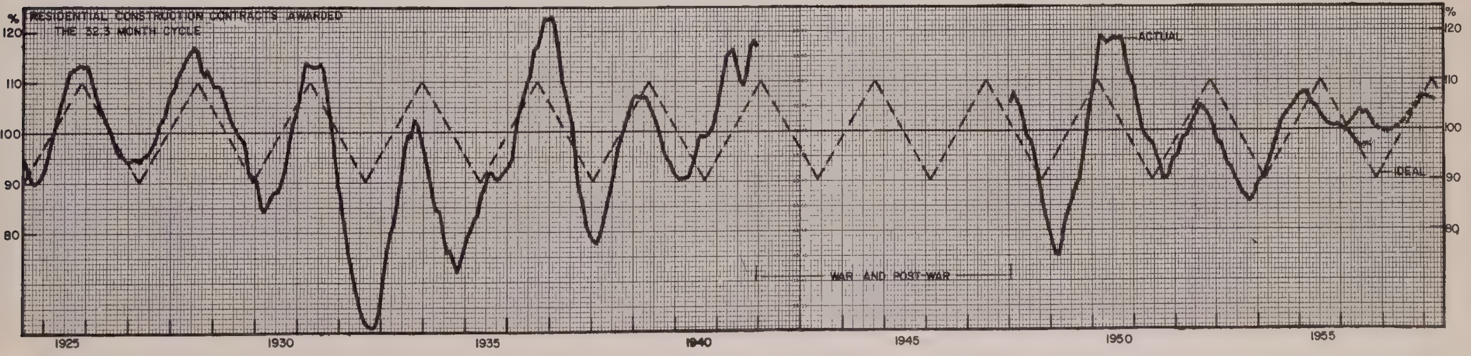
This is very true. Of course we would not include the 32.3-month cycle if we felt that this inclusion was not justified.

However, some people like to reach their own conclusions.

Therefore we are printing below a picture of the record of the past performance of the wave.

On the chart the underlying trend is level at 100%. The solid line shows the actual wave.

The broken line shows the ideal 32.3-month wave. It is this ideal line which is combined with the ideal seasonal pattern and the underlying trend to obtain the broken line used above.



UNEMPLOYMENT

The change in the level of unemployment from April to May was more in line with the typical seasonal pattern than any of the recent months.

7.11% of the labor force was unemployed in May. This is a drop of 6% from the percentage unemployed in April.

The typical monthly change from April to May (as shown in the second column of the table) is a drop of 9%. Thus there was a slight further worsening of the underlying trend—but by a much smaller amount than in recent months.

Although the month-to-month change from April to May was down, the underlying trend of unemployment continued up.

The chart below gives the record of unemployment since 1947. The relationship between the two lines on the chart is the basis of the typical seasonal pattern which is shown in the first column of the table.

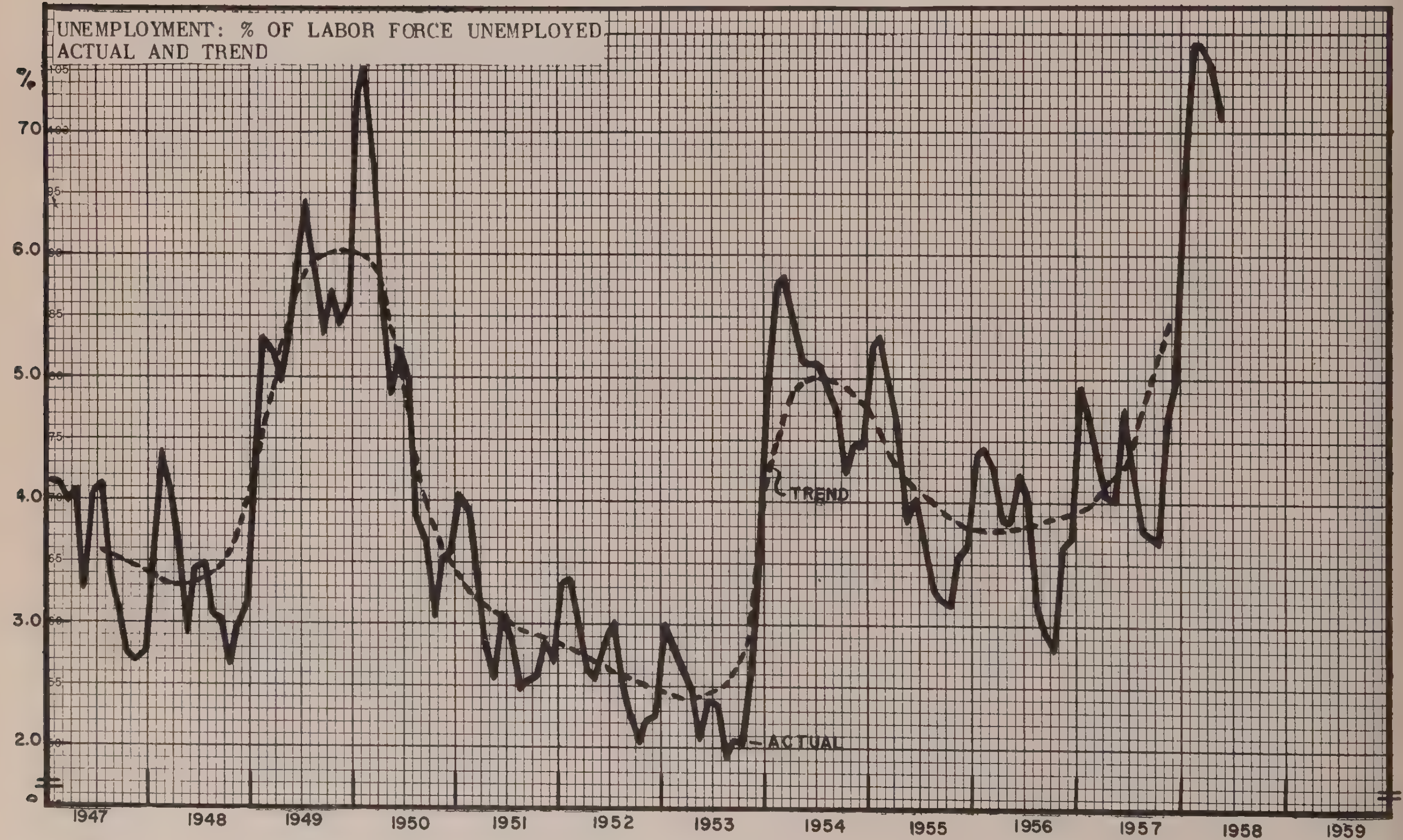
There are many ways of figuring seasonal cycles. We used the techniques which we use for defining a cycle of any length.

The typical figure for any month is just the average relationship between the per cent unemployed and the trend for that month in all the years under consideration.

We will see an increase in June in the per cent unemployed because graduates and students who enter the labor force.

Based on the average experience since 1946, the increase in the per cent of the labor force unemployed from May to June should be about 13%.

Month	Typical Unemployment % of Trend	Typical Monthly Change	1958 Actual Per Cent Unemployed	Actual Monthly Change
Jan.	117		6.70	
Feb.	123	+ 5%	7.70	+15%
Mar.	114	- 7	7.70	0
Apr.	103	-10	7.53	- 2
May	94	- 9	7.11	- 6
June	106	+13		
July	95	-10		
Aug.	91	- 4		
Sept.	88	- 3		
Oct.	82	- 7		
Nov.	92	+12		
Dec.	95	+ 3		


UNEMPLOYMENT: % OF LABOR FORCE UNEMPLOYED
ACTUAL AND TREND

Letters to the Editor

COVER DESIGN WINNER

Dear Mr. Dewey

I hereby enter the cover design contest and my entry is simple: Leave the cover alone!

I see nothing wrong with the cover. Why ape the *Reader's Digest*? Every magazine has a distinctive cover which is its own special trademark and *Cycles* is distinctive, it is eye-catching and a change will not up circulation one member.

Anyone too lazy to lift the cover to find out what is inside would not take time to read the contents anyway, so let's spend time on developing what is between the covers and leave the cover alone.

Cyclically yours,
Elmer Farnham

R.D. 5
Norwich, Conn.

In Reply

Dear Mr. Farnham:

In your letter of April 21 you suggested that we keep the cover of *Cycles* the way it is. We have decided to do so. You, therefore, win the contest and our check for $5.00 is enclosed.

Several other people made the same suggestion, but we received your letter first.

Very cordially yours,
Director

Editor's Note: Although Mr. Farnham won the contest we are still playing with the cover design. However, since our art department functions only about 10 minutes every other Tuesday morning it may be some time before a completely satisfactory design is developed.

CYCLES

Dear Mr. Dewey:

A friend has been showing me his copies of your monthly publication *Cycles*.

I am fascinated with the concept that one may forecast future behavior of natural phenomena solely by reference to history, in the absence of any real understanding of the causes of such behavior. The concept has interesting philosophical implications. In human affairs, for instance, how do you avoid the obvious suggestion of determinism?

Cordially,
C. Russell Cox

Cox Foundation
Chicago, Illinois

Our Reply

Dear Mr. Cox:

Your letter raises two interesting points. Namely, one, how many times must a cycle recur in order to credit the rhythmic behavior with significance? And two, what of the philosophical implications of our observations?

The more regular the waves, the fewer number of repetitions are needed to establish significance. In general, however, if the wave is clear enough so that it can be distinguished easily on a chart by visual inspection, ten repetitions are enough to suggest probable significance—fifteen repetitions are ordinarily quite conclusive.

Of course the fact that a cycle is significant does not in itself prove that the cycle will go on forever. For example: my heart beats about once every second. This behavior is not accidental, but some day it will stop. The same may be true of some of the other rhythmic cycles we study.

In connection with your second point, I see no suggestion of determinism in the existence of rhythmic cycles. I consider most of the cycles we study to be the result of rhythmic environmental forces more or less similar to the seasonal weather patterns with which all of us are familiar. It is perfectly true that the alternation of summer and winter *affects* human behavior; however, we can circumvent these forces, especially if we know when they are going to be operative.

Every cordially yours,
Director

THE STOCK MARKET

Dear Mr. Dewey:

While I realize that it would be impossible at the present time to publish a magazine like *Cycles* without a large membership or other source of revenue, I am disappointed at the indicated lack of cycle students among the newer members. From the letters printed it is obvious that most are interested solely in a sure-fire method for making a quick fortune. Too few seem to have any scientific interest in doing any work in cycles themselves and exchanging views with others, which I believe was the originally intended purpose of the Foundation.

In the six years since I first reported on the 46-Month Cycle in stocks, I have had some amount of correspondence, long distance calls, and actual visits from people around the country. To the best of my recollection at the moment. I do not recall a single person who was really interested in cycles. A few professed initially to be interested in the study of cycles, but it was soon apparent from subsequent contacts that they were only interested in scalping the stock market.

Even though I too am not adverse to profits from stocks and commodities, I like to study these cycles primarily because data are available daily rather than only weekly, monthly, or less frequently. I feel that if we can pinpoint some of these cycles we may be able to determine the cause of cycles of the same length in other phenomena. Until we determine the cause I believe it will be quite difficult to anticipate or forecast the variations which sometimes occur in a cycle that is otherwise exactingly repetitive over a long period of time.

Sincerely yours,
Veryl Dunbar

Cincinnati, Ohio

CONFLICTING FORECASTS

Dear Mr. Dewey:

In the Director's Letter in April's *Cycles* you state: "...as, seemingly, almost everybody is interested in gambling in stocks."

I am glad you noticed this fact and I admit frankly I am one of them. I also noticed the change in contents of *Cycles* in the right direction to serve those subscribers who are interested in stock market. Certainly, I am also quite interested in cycles as such to strengthen my trust in them.

From the great number of investment advisory services, forecasters and predictors I have found two which should be separated:

1) Your predictions which are based on scientifically established facts—cycles—should deserve. trust. In recent copies of *Cycles* you predict a steady decline in stock prices reaching the bottom around 1960.

2) There is an investment advisory service (not far from Chicago; published in October 15 copy of Forbes) which is basing its prediction on Dow theory research and the latest government action to stimulate the economy by reducing the interest rates on Federal Reserve banks loans, by pumping in billions of dollars for the same purpose etc. It seems to me logically that also the predictions of this service are founded on well established facts. This service (and recently a couple more) predicts the inevitable upsurge of stock prices within the next 24 to 30 month reaching the peak around 1960!

As you can see these both well founded predictions differ from each other for full 180 degrees or run in exactly opposite directions!

May I ask you to try to explain this confusing problem? If this question would interest only me I probably would not bother you, however there seems to be many more subscribers who would be grateful to you for any reply.

Furthermore, may be at least a part of those short-sellers are basing their action on your prediction about the steady decline in stock prices. The amount of short sales an all time high (or at least for the past 26 years).

Your counterpart is predicting that those short-sellers will soon be caught in the greatest "Bear Trap " in history!

Sincerely yours,
F. M.

Melrose Park, Illinois

Our Reply

Dear Mr. M.

Obviously an upturn in stocks will trap those short-sellers who have not had the foresight to establish properly chosen stop loss orders. The same, of course, is true of long-side operators when the market turns down.

I think you will get a better understanding of my stock market projection if you will re-read the "Director's Letter'' for April 1958. The cycles merely represent *tendencies*. They are very useful for background information and supplementary information, but cannot be depended upon by themselves for trading until we know a great deal more about them than we do at the present time.

Please note that although the *projection* published in the April 1958 issue of *Cycles* goes down steadily until 1960, the market itself will surely have intermediate upward movements. Moreover, the actual low could come somewhat ahead of or somewhat after 1960 without invalidating the general picture presented by the cycles. Remember that the synthesis shown contains no cycles less than four years long. It is too crude to pin point the turns.

As for the conflict between the investment advisory service you quote and my own projection, I think the best way to resolve it is to wait and see. Obviously, as you say, the two conclusions are inconsistent.

Ever cordially yours,
Director

CAN CYCLES BE MODIFIED?

Dear Mr. Dewey:

Do you agree that the creation of a large number of . . . cycle readers . . . will also create buyers or sellers among a certain percentage of . . . the readers, each of whom will follow the trend projected by entering the stock market with buying or selling orders in such a concentrated volume as to change and defeat the trend you have projected under normal market operations?

H. B. C.

Reno, Nevada

Our Reply

Dear Sir:

Obviously, if enough people bought and sold stock in accordance with a knowledge of the inherent cycles they could obliterate or even reverse these cycle patterns. However, the volume of trading that would result from our studies is so small that in my opinion it would have no detectable influence upon market behavior.

It is possible that if our studies were expanded to cover short term cycles in individual stocks, and if we had many more members than we have, that some modification of the cycles might be detectable. I do not know.

Ever cordially yours,
Director

Chapter Affairs

NEW YORK CHAPTER, REPORT OF MAY MEETING

The New York Chapter of the Foundation held its regular monthly dinner-meeting at the White Turkey Sutton Place restaurant, 300 East 57th Street, New York City, on Tuesday evening, May 20, beginning with a social hour at 5:45 P.M.

Featured Menu

Following a five-course Dutch baked chicken dinner, the seventy-nine Chapter Members and guests who were present heard an engrossing address by E.S.C. Coppock on the subject of "Cycles and Profits." Mr. Coppock is Director of the Trendex Research Group of San Antonio, Texas. His organization supplies economic forecasts to investors, brokers, speculators, and commodity traders.

Featured Speaker

Introducing Mr. Coppock to the audience (the *largest* in our Chapter's six-month history), President Dorland stated:

"I asked our guest speaker several weeks ago for some biographical data I could use in introducing him to you, but being extremely modest by nature, he couldn't bring himself to supply me with that kind of information. However, he did refer me to certain of his friends for facts about him, but they unfortunately have painted a somewhat bleak picture of him! So, under the circumstances, it seems to me that the best I can do is to read to you a portion of a recent letter which our Guest Speaker wrote to one of our Members, Sylvan Joseph. I quote from that letter:

Because I would hate to have you tarred and feathered, Sylvan, and then ridden out of town on a rail, I think it best for you to warn Members of the Foundation's New York Chapter that your friend, Sedge Coppock, is a lazy 'so-and-so', who doesn't prepare his speeches, who cannot be stopped once he starts talking, and who has a bad habit of acting as though he has read next month's *Wall Street Journal* and remembers every word of it."

Coppock Captures Audience

In starting his talk, Mr. Coppock set his alarm-watch for fifteen minutes and announced that, when it rang, his talk would be over and that all those who wished to leave at that point could do so, with no apologies required. However, he so intrigued his audience that he was asked by acclamation to set the alarm for another fifteen minutes. A third period followed in a similar manner. The alarm was then dispensed with, and Mr. Coppock settled down to a thrilling, two-hour presentation that none of those present will be likely to forget. At eleven o'clock (more than three hours after he had started speaking) well over half of his original listeners were still there and urging him to continue.

Highlights of Talk

Perhaps for the purposes of this condensed report, the flavor of his whirlwind talk can best be captured by citing a few selected highlights.

1) Stock market prices and business are not related. Security prices are an anticipation of tomorrow.

2) Stock market prices are a reflection of waves of compulsive optimism and pessimism.

3) There are seven important cycles in human behavior. These cycles represent the mass attitude of people toward the use of money. The lengths of these seven cycles are 15 months, 17 months, 22 months, 30 months, 37 months, 60 months, and 111 months.

4) In a few years there will be a ghastly flight from money. Then is when *property* will be a prime inflation hedge.

5) The free market for gold is cyclical.

6) The next general bull market in the United States will be in the Sixties. It will not be sustained by business in general, but mainly by the commodity-type industries (including gold, the commodity).

7) The three controlling cycles in rye and wheat prices are 108 or 109 weeks long, plus the third and fifth harmonics of such a cycle. The next crest of the 108 or 109 week cycle will come in November and December of this year.

8) Tobacco stocks are so predictable that it is not even fun to study them.

9) Well-defined cycles operate in bonds, which makes the bond market the most predictable of all markets. The easy predictability of the bond market is due in part to the fact that bond prices are determined to a large degree by the applicable interest rates.

Return Engagement

Since Mr. Coppock's appearance, so many compliments on his presentation have been received that arrangements have already been made for a "retake" next May.

Jack A. Dorland

Geisinger Indicator

BACKGROUND

The Modified Geisinger Indicator is a series of numbers which, in the past, have gone up and down ahead of corresponding movements of the Federal Reserve Board Index of Industrial Production. The Modified Geisinger Indicator thus throws some light on the probabilities of the future.

The F. R. B. Index of Industrial Production measures physical production in the U. S. A. It is a weighted average of tons, yards, gallons, and numbers of things produced each month.

The Modified Geisinger Indicator is the sum of two Indicators, the Geisinger Indicator and a First Difference Indicator.

The Geisinger Indicator was invented by Robert Geisinger. It is derived from figures which are published each month in the *Survey of Current Business*. It is recorded for you in Column 2 of the table which summarizes the forecast.

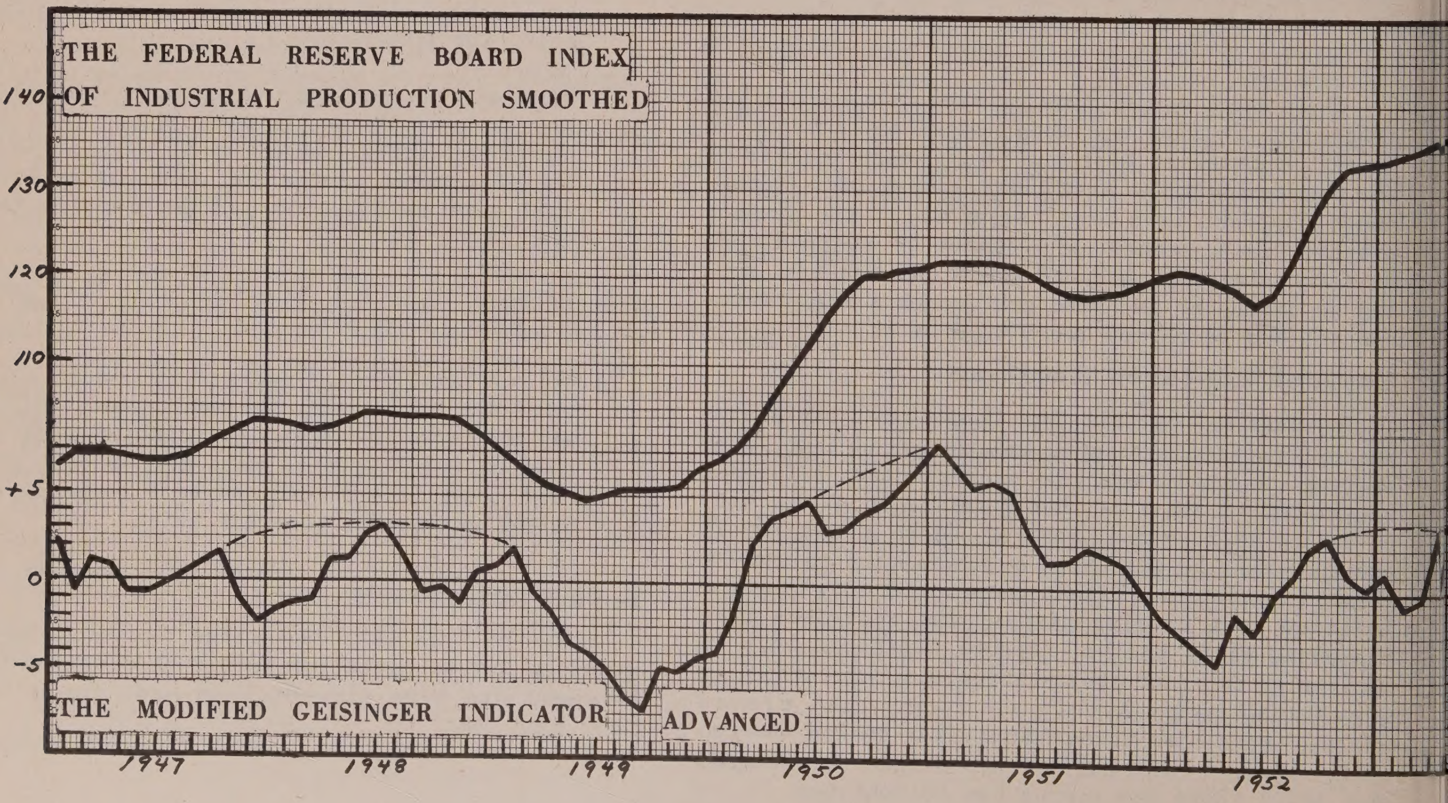
Column 3 of the summary table gives the First Difference Indicator, which is merely the amount by which the smoothed F. R. B. Index is above or below the value for the preceding month. The smoothing is effected by means of a centered 3-month moving average posted to the second position.

Column 4 is the sum of the values in Columns 2 and 3. This value is called the Modified Geisinger Indicator. It suggests in a general way what the F. R. B. Index may do some eight months later.

The smoothed values of the F. R. B. Index of Industrial Production are diagrammed below as the top line on the chart. The latest actual monthly Index of Production is recorded by a dot.

The bottom line on the chart gives the Modified Geisinger Indicator (Column 4 of the table), advancing it by eight months. This advance is for two reasons: (1) so that you can more easily compare the past behavior of the Modified Geisinger Indicator with the behavior of the F. R. B. Index, and (2) so that you can have a better idea of what the F. R. B. Index may do in the future.

The correspondence between the two lines on the chart is general rather than specific. It is not to be expected that every little wiggle in the Modified Geisinger Indicator is significant. It is rather the broad sweep of the line which is to be watched. The dashed lines which are added show the manner in which the eye should follow the Indicator.



FORECAST

The decline of the F. R. B. Index of Industrial Production, was checked in May at a value of 127. This value is 13% below the peak. (147 in December of 1956.)

The Geisinger Indicator value for February 1958 (October 1958 when projected) is confirmed at -2.6. This value is up 1.6 from the low of -4.2 in November 1957 (July 1958 when projected). The values for March and April 1958 (November and December 1958 when projected) cannot be lower than -2.4 and -2.8 respectively.

The First Difference Indicator for March 1958 (November 1958 when projected) is confirmed at -2.33. The preliminary value for April is 1.67.

The Modified Geisinger Indicator—the sum of the two other indicators—is confirmed at -5.26 for February 1958 (October 1958 when projected). Values for March and April 1958 (November and December when projected) cannot go lower than -4.73 and -4.47 respectively.

All of this is encouraging.

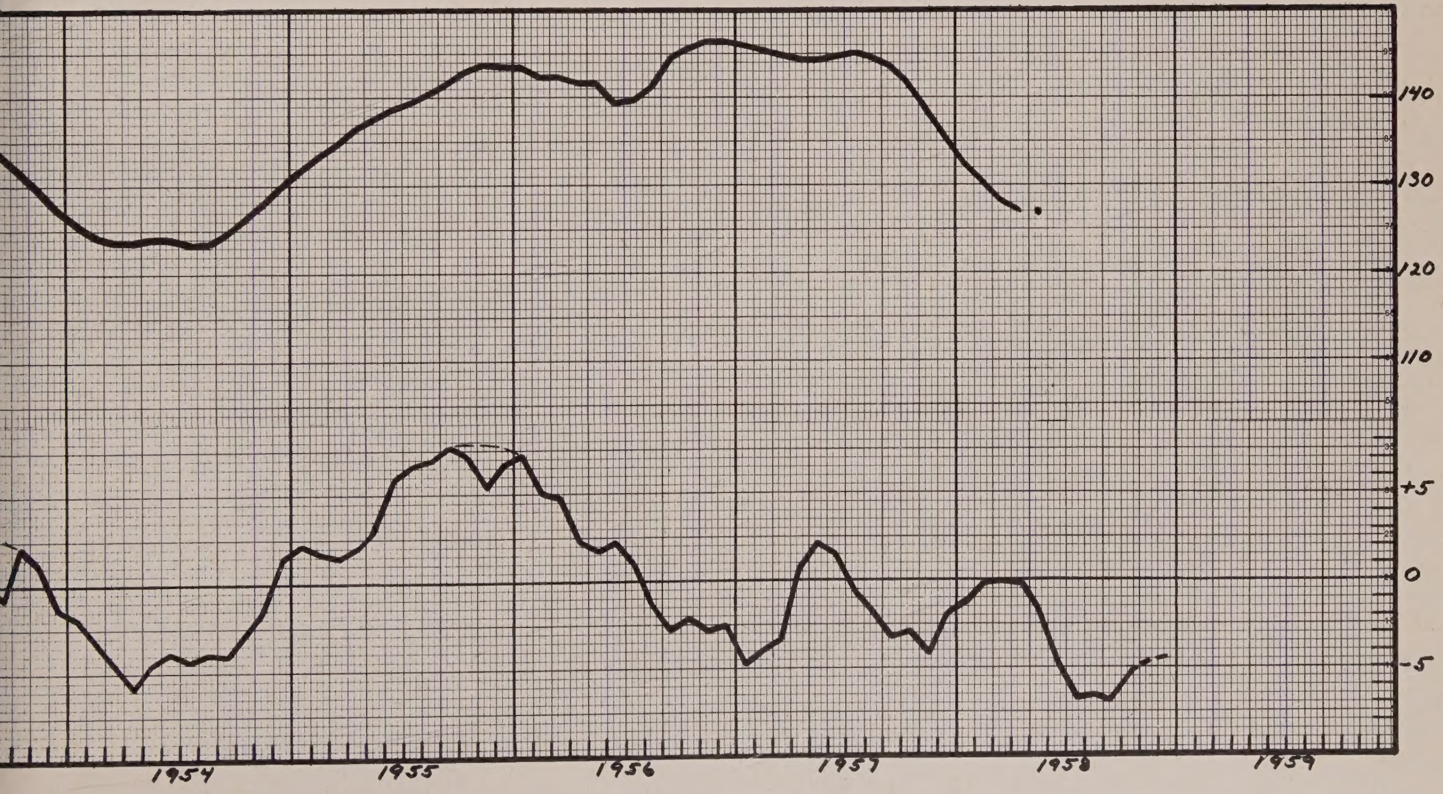
Remember, however, that the Geisinger Indicators are much more volatile than the F. R. B. Index of Industrial Production. They have numerous minor moves that have no counterpart in the F. R. B. figures. Keep your fingers crossed about any real resumption of the boom until the Geisinger Indicator has reached 2.50.

E. R. Dewey

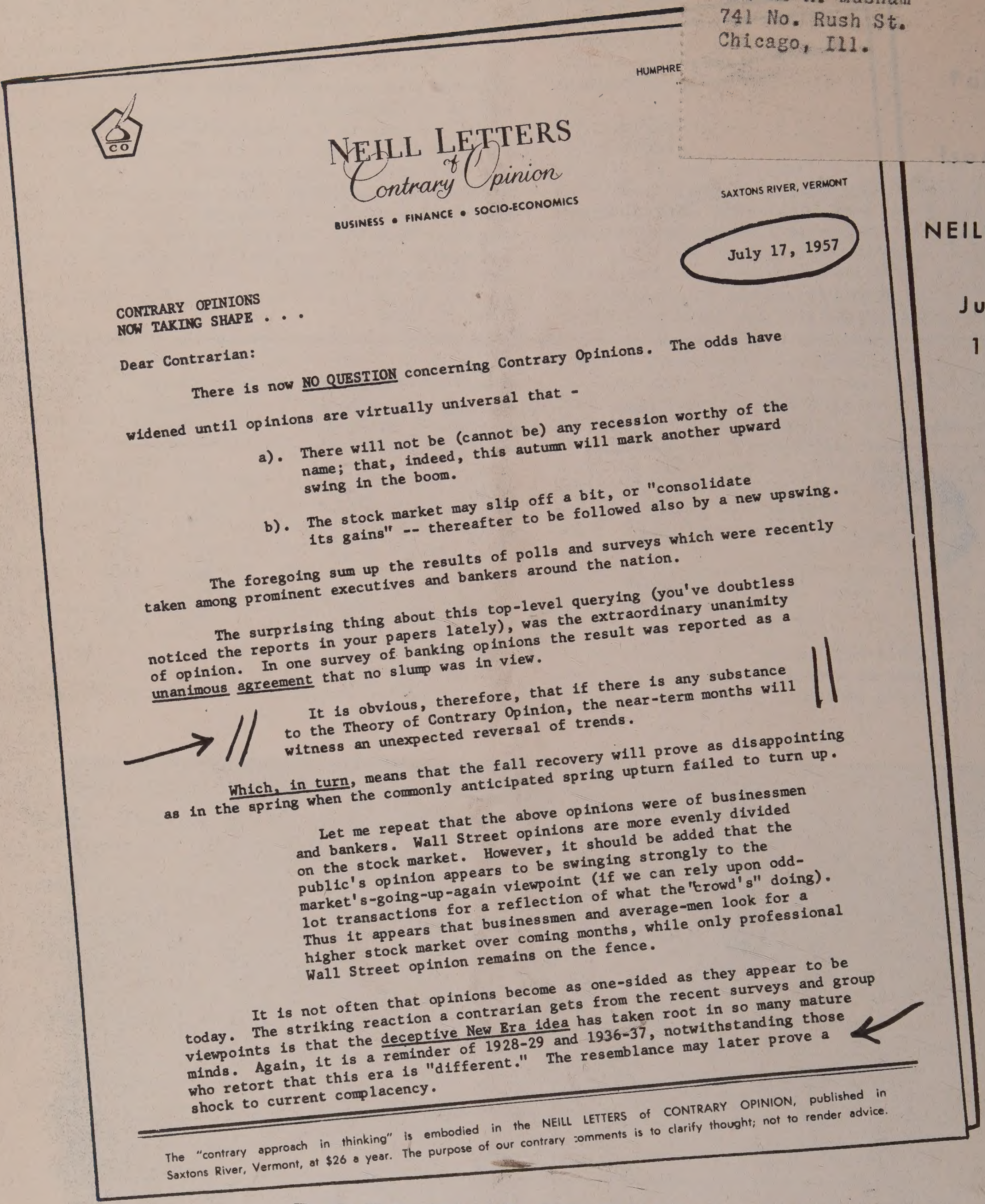
June 25, 1958

Month	1 F.R.B. Index	2 Geisinger Indicator	3 First Difference Indicator	4 Modified Geisinger Indicator	Timing Advanced 8 Months
Oct. 1957	142	-3.4	-1.50	-4.90	June 1958
Nov.	139	-4.2	-2.50	-6.70	July 1958
Dec.	135	-3.6	-3.00	-6.60	Aug. 1958
Jan. 1958	133	-3.8	-3.00	-6.80	Sept. 1958
Feb.	130	-2.6	-2.66	-5.26	Oct. 1958
Mar.	128	-2.4w	-2.33	-4.73w	Nov. 1958
Apr.	126	-2.8w	-1.67p	-4.47w	Dec. 1958
May	127p	*	*	*	Jan. 1959

p - preliminary
* - not yet available
w - worst possible



Mr. H. A. Musham
741 No. Rush St.
Chicago, Ill.



HUMPHRE

NEILL LETTERS of Contrary Opinion
BUSINESS • FINANCE • SOCIO-ECONOMICS

SAXTONS RIVER, VERMONT

July 17, 1957

CONTRARY OPINIONS
NOW TAKING SHAPE . . .

Dear Contrarian:

There is now NO QUESTION concerning Contrary Opinions. The odds have widened until opinions are virtually universal that -

a). There will not be (cannot be) any recession worthy of the name; that, indeed, this autumn will mark another upward swing in the boom.

b). The stock market may slip off a bit, or "consolidate its gains" -- thereafter to be followed also by a new upswing.

The foregoing sum up the results of polls and surveys which were recently taken among prominent executives and bankers around the nation.

The surprising thing about this top-level querying (you've doubtless noticed the reports in your papers lately), was the extraordinary unanimity of opinion. In one survey of banking opinions the result was reported as a unanimous agreement that no slump was in view.

It is obvious, therefore, that if there is any substance to the Theory of Contrary Opinion, the near-term months will witness an unexpected reversal of trends.

Which, in turn, means that the fall recovery will prove as disappointing as in the spring when the commonly anticipated spring upturn failed to turn up.

Let me repeat that the above opinions were of businessmen and bankers. Wall Street opinions are more evenly divided on the stock market. However, it should be added that the public's opinion appears to be swinging strongly to the market's-going-up-again viewpoint (if we can rely upon odd-lot transactions for a reflection of what the "crowd's" doing). Thus it appears that businessmen and average-men look for a higher stock market over coming months, while only professional Wall Street opinion remains on the fence.

It is not often that opinions become as one-sided as they appear to be today. The striking reaction a contrarian gets from the recent surveys and group viewpoints is that the deceptive New Era idea has taken root in so many mature minds. Again, it is a reminder of 1928-29 and 1936-37, notwithstanding those who retort that this era is "different." The resemblance may later prove a shock to current complacency.

The "contrary approach in thinking" is embodied in the NEILL LETTERS of CONTRARY OPINION, published in Saxtons River, Vermont, at $26 a year. The purpose of our contrary comments is to clarify thought; not to render advice.

of
NEILL LETTE
of
July 17,
1957

DOES THIS PROVE ANYTHING?

We think it shows that the Theory of Contrary Opinion proves out in practice, when you consider the Boom's break-up and the stock market's drop. Obviously, one page of comment does not demonstrate fully what our Letters of Contrary Opinion aim to accomplish (which is to avoid the "crowd's" opinions and actions). For further demonstration and introduction may we send you our biweekly Letters for 20 weeks (10 Letters) at a nominal cost of $7.50, which will include Mr. Neill's 136-page book, "The Art of Contrary Thinking"? Address Neill Letters, Saxtons River, Vermont. *(N.B. - No stock market advice or investment counsel offered.)*